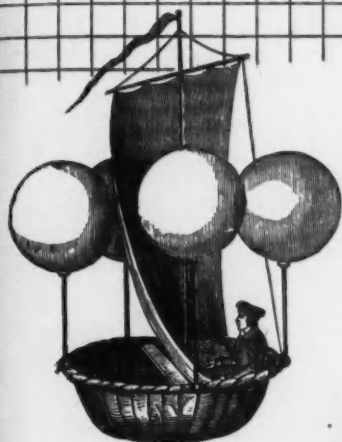


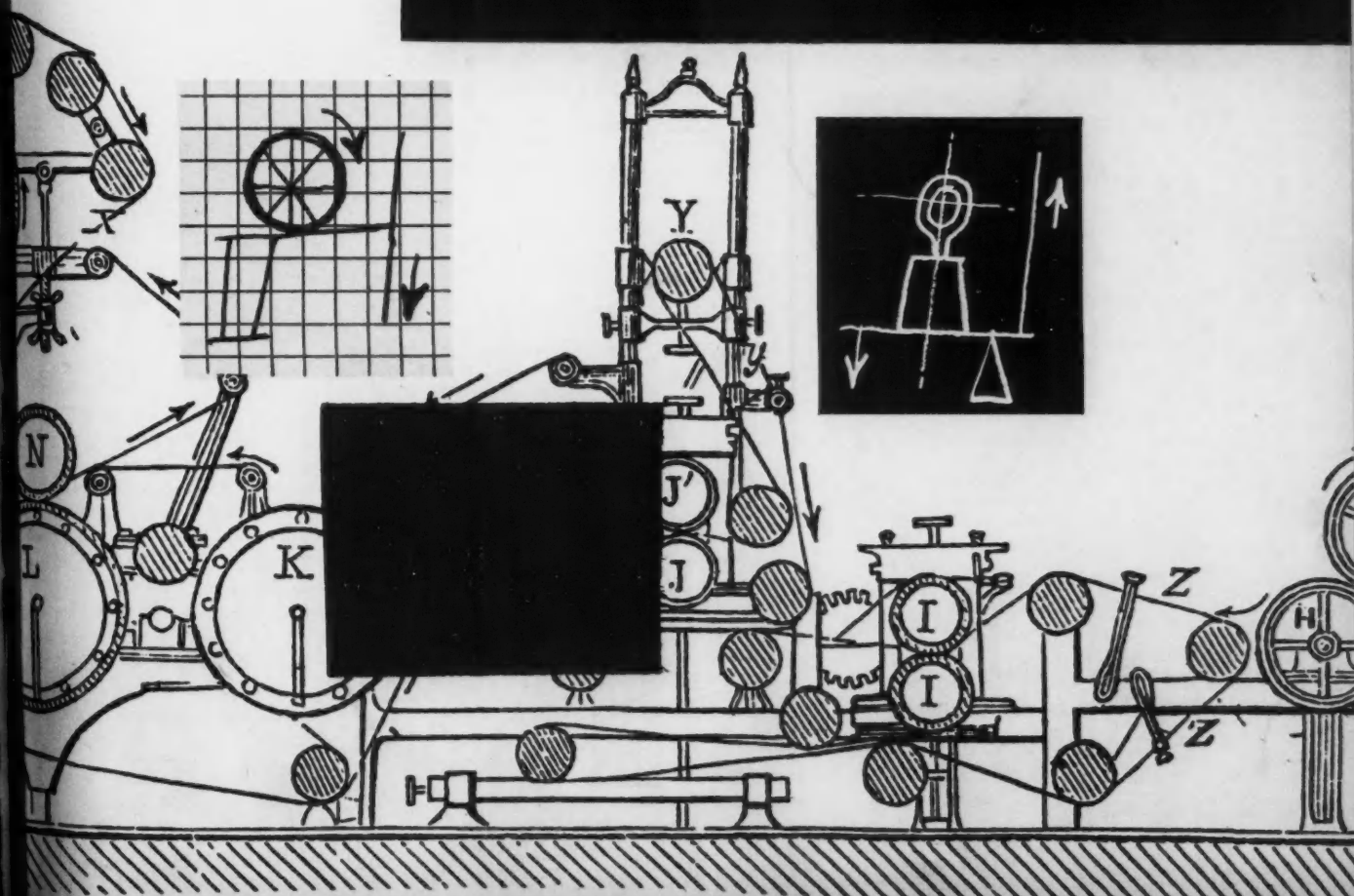
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# College Board Review

WINTER 1957 • NO. 31



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The College Entrance Examination Board is composed of 180 member colleges and 32 member associations. Each member college has two representatives on the Board. Member associations have from one to six representatives. Members and their representatives are listed in the *Reports to the Director*. Meetings of the Board are held on the first Wednesday in April and the last Wednesday in October.

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## **College Board Review**

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Illustrations: The theme of Dan Shepiro's cover is "Experimentation," and although the relationship of College Board research to the artist's collage choices may be invisible at first glance, it does exist. A test, like a machine or an airship, is designed to do something: the goal must be decided, the method defined and found workable, and the result proved satisfactory through trial. All other illustrations in this issue are products of Stanley Wyatt's versatility.

## NEWS OF THE COLLEGE BOARD

### Member college meetings

**Discuss Board problems:** A series of small and informal meetings has been arranged by representatives of College Board member colleges for the discussion of Board problems which will be presented to the full Board at its meeting on April 3. The 11 meetings scheduled for January, February, and March will enable the members to familiarize themselves with the problems which are confronting the Board, to discuss them fully with the Board's officers, and to offer recommendations for their solution.

Among the problems, those to which the members have been asked to devote particular attention concern membership policy, organization, test and service program developments, relationships with Educational Testing Service, and finances. Factors relating to these problem areas include the rapid growth in college membership in recent years, which has resulted in questions involving consideration of the prospective size and composition of the Board and the representation of tax-supported institutions and secondary schools. Other aspects of the Board's growth to be discussed are its legal incorporation under a somewhat modified organizational structure better suited to its present size and complexity, the increase in scope and diversity of the Board's testing programs and other services, the pressure exerted on ETS by mounting Board work loads, and the impact which candidate volume increases and new program offerings have had on the Board's finances.

**Areas covered:** Three of the meetings had been held at the time this issue of the *Review* went to press. The member college groups attending, places of meeting, chairmen, and dates were: West Coast colleges, San Francisco,

Dean Edward Sanders of Pomona, Jan. 22; Eastern men's colleges, New York City, Dean Albert I. Dickerson of Dartmouth, Jan. 28; and Mid-western colleges, Chicago, C. William Reiley, director of admissions, Northwestern, Feb. 11. Other scheduled meetings are: Southern colleges, Atlanta, Benjamin F. Cameron, director of admissions, University of the South, Feb. 25; Colleges of central and western Pennsylvania, Carlisle, Dean Benjamin D. James of Dickinson, Feb. 20; Eastern women's colleges, New York City, Executive Vice President Mary E. Chase of Wellesley, Feb. 28; upper New York State colleges, Hobart College, John S. Witte, director of admissions, Hobart, Mar. 7; New York City metropolitan area colleges, New York City, Dean William Hazell, Jr. of Newark College of Engineering, Mar. 14; Colleges of the Philadelphia, Baltimore, and Washington areas, Villanova, Reverend Thomas A. Burke, registrar, Villanova, Mar. 16. Two other meetings which had not been definitely scheduled at press time will be held in Providence and Boston in March for New England member colleges.

### Three Georgia SAT dates set

**State system requirement:** Three special administrations of the Scholastic Aptitude Test have been scheduled for residents of Georgia who plan to apply for admission to one of the 15 colleges of the University System of Georgia.

By action of the University System's Board of Regents, the test will be required of all candidates for admission as first-quarter freshmen starting with the fall quarter of 1957. The dates on which the SAT will be administered at approximately 50 examination centers throughout the state are April 6, June 1, and September 4.

The colleges which will require the test are: Abraham Baldwin Agricul-

tural College, Albany State College, Fort Valley State College, Georgia Institute of Technology, Georgia Southwestern College, Georgia State College of Business Administration, Georgia State College for Women, Georgia Teachers College, Middle Georgia College, North Georgia College, Savannah State College, South Georgia College, the University of Georgia, Valdosta State College, and West Georgia College.

### Standing committees

**Membership completed:** Appointments recently announced by Dr. Archibald MacIntosh, acting president of Haverford College and Chairman of the College Board, have completed the membership of College Board standing committees for the current year.

Morris Meister, principal, High School of Science, New York, New York, is the new chairman of the Committee on Examinations; Arthur E. Jensen, dean of the faculty, Dartmouth College, is the new vice chairman. New members of this committee are Ula Hennes, senior counselor, Mirabeau B. Lamar Senior High School, Houston, Texas; David D. Henry, director of admissions, Harvard College; Bernard P. Ireland, associate director of university admissions, Columbia University; and Hollace G. Roberts, director of admissions, Western Reserve University. Retiring members of the committee are Albert E. Meder, Jr., dean of administration, Rutgers University (former chairman of the committee); Frederick B. Agard, professor of linguistics, Cornell University; Ruth Jenkins, headmistress, Annie Wright Seminary, Tacoma, Washington; Dorothy Marshall, dean, Bryn Mawr College; and Denham Sutcliffe, professor of English, Kenyon College.

Newly appointed to the Committee

on Membership are Constance E. Ballou, director of admissions, Radcliffe College; Oliver W. Melchior, principal, Scarsdale High School, Scarsdale, New York; Emery R. Walker, Jr., dean of admission, Brown University; and Herbert H. Williams, director of admissions, Cornell University. They replace Albert I. Dickerson, dean of freshmen, Dartmouth College; Lloyd S. Michael, superintendent, Evanston Township High School, Evanston, Illinois; and Clyde Vroman, director of admissions, University of Michigan.

The Committee on Nominations has been enlarged to include six members with the addition of M. Robert Cobbledick, director of admissions, Connecticut College.

One new member on the Committee on Research and Development, John B. Carroll, associate professor of education, Harvard University, replaces Edward J. Shoben, Jr., associate professor of education, Teachers College, Columbia University.

### Candidates Reply Date

**Earlier date studied:** The question of using an earlier Candidates Reply Date in the future has been referred to College Board member colleges for their consideration. The annual date, which this year will be May 22, is the earliest date by which colleges subscribing to the agreement can ask candidates to reply to notices of admission or financial aid offers. Colleges subscribing to the 1957 date are listed on page 33.

In the past, the Candidates Reply Date has been set by the Board in relation to the March testing date in order to allow 27 days for the preparation of all Achievement Test score reports, three days for delivery of the reports to all colleges, and a maximum of 37 days for the colleges to complete their consideration of applications and notify candidates of the action taken on them. Since it is unlikely that the score reports can be prepared more rapidly in the face of an increasing number of candidates, the establishment of an earlier reply date would reduce the 37-day college period.

Alternative possibilities presented to the colleges for consideration are 28-day or 21-day periods, which in 1958 would result respectively in a

### New member association

The Headmistresses Association of the Middle West was inadvertently omitted from the report of educational associations elected to membership at the fall meeting of the College Board which appeared in the last issue of the *Review*. The eight associations elected at that time brought the total number of member associations to 32.

Candidates Reply Date of May 12 or May 5. The responses of the colleges will be studied by the Executive Committee, which is expected to report its recommendation at the Board meeting on April 3.

### Commission on Mathematics

**Executive director named:** Albert E. Meder, Jr. has been granted leave from Rutgers University, where he is dean of administration, to serve as executive director of the College Board's Commission on Mathematics during 1957. Dean Meder, a former chairman of the Board's Committee on Examinations and member of the Commission on Mathematics, has taught mathematics in college, first at Columbia from 1922 to 1926 and since 1926 at Rutgers. He was appointed professor of mathematics at Rutgers in 1944 and has also served as secretary and dean of the university.

The commission, which was appointed a year ago to study the present secondary school mathematics curriculum and recommend changes suggested by modern mathematical developments and contemporary needs, will meet on April 12-13 to discuss the exploratory work of its members and subcommittees.

### Seminar papers available

**Admissions Information:** The papers presented at the College Board's first Seminar on Admissions Information, which was held last September, have been published under the title *Admissions Information 1*. The volume includes discussions of methods em-

ployed by colleges to collect, interpret, and use admissions data to benefit the student and the institution.

A descriptive announcement of the book may be obtained by writing to College Entrance Examination Board, Box 592, Princeton, N. J., or Box 27896, Los Angeles 27, Calif. The cost is one dollar per copy.

### Advanced Placement Program

**School interest rises:** Reports from schools indicate a substantial increase in the offering of college-level courses for able students who wish to be prepared for advanced college work. Approximately 170 schools have notified the College Board that they will have advanced students who are expected to take a total of more than 5,000 examinations of the Advanced Placement Program this May. Last year 1,229 students from 104 schools took 2,199 examinations.

Registration for the 1957 examinations to be administered during the week of May 13 began on February 15 and will continue through April 8. Full information on registration, the testing schedule, fees, grade reporting, and examination centers appears in the bulletin of information *Advanced Placement Examinations*.

**College use reported:** A survey of 130 colleges entered in 1956 by students who took advanced placement examinations has shown that about 60 per cent of the students received academic credit or advanced placement, or both, in one or more subjects. Among the students who did not receive credit or placement, some did not ask for it, and others had low examination grades, inadequate preparation, were not recommended by their schools, decided not to continue the same studies in college, or entered colleges which did not practice advanced placement.

Of the 130 colleges, at least 76 are willing to consider candidates for credit and advanced placement. Among the other 54 colleges in the group, 26 gave advanced placement only, 20 had so few advanced placement students that their policies were not shown in their reports, and eight reported that it was contrary to their policies to grant credit or placement.



## COLLEGE BOARD RESEARCH NOTES

### SAT score range studied

**Greater accuracy sought:** This year a number of College Board member colleges are cooperating with the Board on a study of the Scholastic Aptitude Test which, it is hoped, will suggest how the test's range of accurate measurement may be extended to meet the increasing need for an instrument which can discriminate more exactly in the low and high ranges of ability.

When the SAT came into widespread use 15 years ago the Board's membership consisted of a relatively small, homogeneous group of colleges. They required the SAT of applicants and the test was rather directly designed to cover the general characteristics of the applicants attracted to these colleges. Thus the test was originally conceived as an instrument with scores ranging from 200 to 800.

It was assumed at that time, as it has been until very recently, that the level of difficulty of the SAT, for the population for which it was intended and, indeed, the population most likely to take it, was such that only an insignificant number of candidates (perhaps some 5 per cent in all) would score either below 300 or above 700 on the standard score scale. The test, therefore, has always been constructed so as to yield the most precise and reliable measurement possible within the 300-700 range.

It was not considered to be a serious

shortcoming that scores from 200 to 300 or from 700 to 800 were somewhat less meaningful and the distinctions between them somewhat less reliable. No Board member college, at that time, was concerned with selective admission from a population of applicants scoring in the lower range of scale scores. At the other extreme, applicants scoring in the upper range were so clearly superior and therefore desirable that few, if any, admissions decisions depended on relative certainty that a score of 750 was reliably different from a 725 or 775.

**Scale extremes now used:** Two relatively recent developments have sharply increased interest in the reliability and the discriminability of measurement at the two poles of the SAT scale.

One of these is the use of the test by an increasing number of scholarship sponsors, among them those with large national programs which attract thousands of candidates. Whether or not a score of 750 is reliable and reliably different from a score of 725 is a serious matter for those applying for and those awarding scholarships. Decisions influenced by differences between scores in the 700-800 range have come to have as serious personal and administrative consequences as those long associated with differences in the 500-600 range at member colleges.

A second source of interest is the growing number of Board member col-

leges which are attempting to practice selective admissions procedures with an applicant group yielding an appreciable number of scores at the lower end of the SAT scale. For such institutions to be able to do a good job of selective admission (or of post-admission curricular guidance or course sectioning), the distinction between a score of 275 and one of 300 must be as reliable as it is possible to make it.

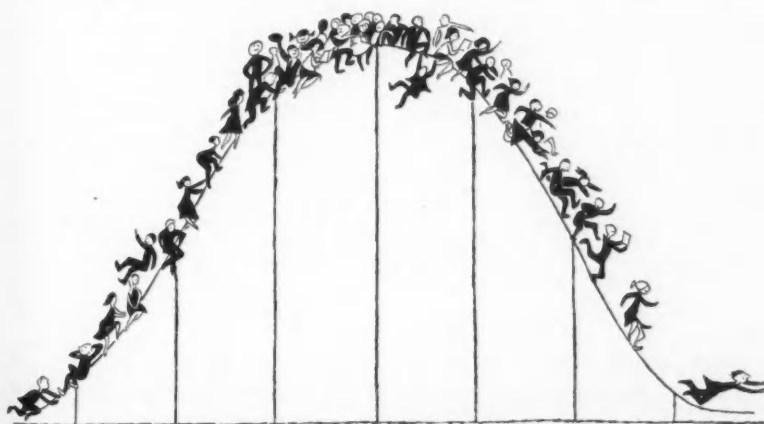
In short, the entire 200 to 800 range has become significant in at least two important aspects of college admissions. It will be very helpful if the SAT can yield accurate and reliable scores throughout the scale. Can this be done? This is the question which the research project is trying to answer.

**Two possibilities tried:** The entering freshmen of colleges participating in the study were tested on experimental versions of the SAT soon after they arrived on campus last fall. This spring their college records will be obtained. A statistical analysis of the test scores and course grades will enable the Board's Committee on Research and Development to determine whether the SAT of the future should be of the "multi-level" or of the "extended range" type.

The study may show that a single test can be so "stretched" that it will function adequately throughout the entire scale range. It is suspected that the current SAT does not do that, but that if the test were revised so as to include a different distribution of item (question) difficulties, this feat might well be accomplished. This approach, described as the extended range, entails a diminution of items of average difficulty and an increase of the number of items of rather low and rather high difficulty. It has not been known whether items of the various types now found in the SAT can be constructed so as to function well in an extended range framework.

If the extended range attempt does not turn out to be the solution of the problem, the study may indicate that the multi-level approach should be used. The current research is studying both possibilities simultaneously so that the results can be compared.

The multi-level solution would require two separate but partially overlapping forms of the SAT. One form



would measure candidate ability throughout the 200 to 600 scale range; the other would function optimally throughout the 400 to 800 scale range. An applicant would then have to be routed by a third instrument—a so-called routing test—to the form most appropriate to his ability. This procedure, being more involved, would probably be more costly than that of the single extended range test. Just how the routing would be done after candidates have arrived at their testing centers is a recognized problem which is also under study.

It is expected that the outcomes of research in this area will be available approximately a year from this time.

### Studies in progress

**Test coaching:** Because the attempt to prepare students for College Board tests through intensive drill with sample questions may become widespread as college admission pressures mount, the Board has undertaken the third in a series of "coaching" studies. The current study is designed to ascertain (1) whether intensive and individual coaching of highly motivated students from both public and independent schools with materials very similar to those which appear in the Scholastic Aptitude Test does produce an increase in final SAT scores and (2) if significant increases in test scores are obtained under such circumstances, whether some relatively permanent gains for the candidate may not also result from such coaching, gains which might then be reflected in higher freshman year averages in college.

**Campus cultures:** The Board is supporting a project directed by Dr. C. Robert Pace, head of the department of psychology of Syracuse University, which will attempt to construct instruments capable of measuring, in personality trait terms, the psychological and social environmental demands that are part of the "culture" of a college campus. Certain personal characteristics, interests, activities, and proficiencies are considered desirable by the administrative officers, faculty, and student bodies of American institutions of higher education. Large institutions may present internally varied and conflicting demand patterns;

smaller colleges, only a single, relatively homogeneous constellation of expectations and rewards. The study may determine whether detailed knowledge concerning the college environment could play an important role in predicting college success.

**Biographical inventory:** The development of a biographical inventory which might be useful in evaluating candidates for admission is the subject of a study being conducted for the Board by Dr. Anne Anastasi, of the department of psychology of Fordham University. This study will proceed by establishing two criterion groups, one consisting of students judged to be highly "successful" according to detailed criteria established by a given college, and the other consisting of students judged highly "unsuccessful" according to these criteria. A useful biographical inventory would then be one that could differentiate between the members of two such groups before their admission to college and on a basis different from that provided by the Board's present tests.

**College traits compared:** A study of the Board's member colleges is now nearing completion under the direction of Dr. Natalie Rogoff, of the Bureau of Applied Social Research of Columbia University. On the basis of published and hitherto unpublished data collected by various governmental, institutional, and independent research agencies, an attempt will be made to discover major similarities and dissimilarities among Board member colleges on the one hand, and between Board and non-Board members on the other.

**Language test experiment:** The possibility of constructing reliable and valid one-hour foreign language tests that will yield measures of both reading and listening comprehension is now under consideration on an experimental basis as a result of the interest in such tests expressed by teachers. In this study an attempt will be made to shorten the current one-hour language achievement test (which is entirely devoted to testing comprehension of printed materials) to a half-hour of testing time so that the remaining half-hour can be used for testing listening

comprehension. In the experiment separate scores will be obtained, rather than a weighted single score, in order to simulate actual conditions of use in which some colleges might wish to consider reading comprehension (or listening comprehension) only, while others might prefer to weight the two scores in relation to their own programs. Whether or not tests of this kind can be constructed and introduced by the Board has not been decided, but it is hoped that the results of the study will be useful in making that decision.

### Reports completed

**Language placement aid:** Methods of organizing data which will assist colleges which administer College Board Placement Tests in the foreign languages to entering freshmen are described in *Procedures for Developing Local Norms for Foreign Language Placement Tests*. This report, the result of a recent study, shows that language course sectioning according to ability level and course difficulty may be more successfully accomplished when based on data collected by the individual college than when based on general norms. Copies of the report may be obtained by writing to: College Entrance Examination Board, 425 West 117 Street, New York 27, N. Y.

**Test analysis explained:** A description of the principal methods and concepts used in analyzing a test which will serve as an interpretive guide for readers of test analysis reports is now available under the title *Technical Manual for Users of Test Analyses*. This report explains how test makers and the committees evaluating their work use a test analysis to learn something of the level and spread of test difficulty with respect to the examinee group for whom it has been prepared, the test's reliability, its speededness, and the internal consistency of its items. It is hoped that the report will assist interested persons who are not directly involved in College Board test construction work to understand what is being done, to evaluate the operations, and to comment upon them. Copies of the manual are also available from the College Board at the above address upon request.

# The Tests of Developed Abilities

## The tests' background

BY HENRY S. DYER

Back in 1949 Frank H. Bowles made some interesting comments<sup>1</sup> about the future development of College Board tests. As a result of the new emphasis on general education in the colleges, he saw changes coming in the kinds of tests that would be suitable for college admission. With these changes in mind, he produced the notion of "tests of developed aptitudes." These, he thought, would be characterized by an "increasing emphasis on measurement of depth of understanding and ability to apply knowledge of principles to solutions of problems" and a "decreasing emphasis on measurement of knowledge of specific details."

These remarks probably grew out of certain grumblings about the Achievement Tests that were then current in the Board's program. On one side were those who felt that the tests, by putting a heavy premium on factual knowledge, deprived the schools of freedom to organize instruction in the ways they thought best calculated to foster mature thinking. On the other side were those who felt that the content of the tests was not well enough defined to provide the sort of blueprint they thought they needed for preparing college-bound students. The notion of "tests of developed aptitudes" was an attempt to find a common ground on which the grumblers could agree with each other and with the Board.

Predictions about tests by the Director of the College Board are likely to be accompanied by certain actions designed to increase the probability of

their fulfillment. In this case, two subcommittees were put to work. One of them was to take a look at the Achievement Tests as a whole and bring in recommendations for the development of new types. The other was to review more specifically the tests in science and "consider them in relation to present trends in science teaching in both schools and colleges."

This second subcommittee looked the idea of developed aptitude squarely in the eye, decided it had merit, and attempted to demonstrate the point by creating an actual test. Known as the "Test of Science Reasoning and Understanding," this test and the thinking behind it are described in an article by Paul F. Brandwein in the November 1951 issue of the *College Board Review*.<sup>2</sup>

### Planning started in 1952

By 1952 the original idea seemed to be so good that three new six-man committees were appointed to take it in hand, expand it, and see whether it was worth the cost of converting it into a series of experimental tests. At the same time it got a new name: the word "ability" was substituted for the word "aptitude." The name change came about because it was thought the term "developed aptitude" might be ambiguous to some people. An aptitude is usually regarded as something that stays put; an ability, however, may grow. For instance, one would not say, "Last year he had the aptitude to run 100 yards in 12 seconds; this year he has the aptitude to run it in 10 flat." But one

might say, "Last year he had the *ability* to run 100 yards in 12 seconds; this year he has the *ability* to do it in 10."

So the three new committees were known as the Committees on the Tests of Developed *Ability*. One of them, under the chairmanship of Professor Fletcher Watson from Harvard, picked up where the former subcommittee on science testing had left off. A second committee, with President Benjamin F. Wright of Smith College as chairman, undertook to see whether anything could or should be done about a Test of Developed Ability in Social Studies. And President Frederick H. Burkhardt of Bennington College headed a committee similarly charged to investigate the possibilities in the humanities. The membership of each committee was carefully chosen so that several shades of opinion in the colleges and secondary schools would be represented. During the course of a full year, 1952-1953, each committee met a number of times and worked hard.

From the outset they were given a free hand to work out their own ideas about what a test of developed ability should be like. They were not committed in advance to a test of any particular length or type. They were urged to let their thinking range well outside the domain of the multiple-choice



Henry S. Dyer, vice president of the Educational Testing Service, first became concerned with the Tests of Developed Ability as Associate Director of the College Board, 1952-54.

<sup>1</sup>49th Annual Report of the Director (New York: College Entrance Examination Board), p. 51.

<sup>2</sup>*College Board Review*, No. 15, p. 227.



question. Their primary job was to define in concrete terms what a student should be able to *do* in order to demonstrate that he had learned how to *think* in each of the three areas.

The meetings of the committees were always exciting and often controversial—especially when the participants got off the plane of generalities and got down to the hard business of defining what they meant in terms of actual test questions. They called in outside experts, they made studies of existing tests in the Board's program, and in one instance, they gathered some actual performance data from the schools. The reports with which they finally concluded their deliberations said in substance that tests of developed ability in the three areas seemed both feasible and highly desirable, that the Board should spend some money to develop an experimental battery of such tests, and that a fairly extensive program of research should be undertaken with the experimental battery to see

whether the ideas around which it was built had validity. They spelled out what they thought the nature of each experimental test should be by providing quantities of sample questions which they themselves had devised.

### *Two key ideas, three unknowns*

There were two key ideas behind the suggested tests: first, that they would not impose any serious restrictions on the subject matter content of secondary school curricula; and second, that they would define, in terms of the tasks required, a number of different intellectual abilities which are important for the college preparatory student and which at the same time can be developed under a variety of instructional patterns.

There were also three big unknowns connected with the enterprise. One of them was this: Were the kinds of abilities the committees had in mind the sort that could actually be "developed"

by good teachers or was their growth dependent on factors that the school could not materially affect one way or the other? The second unknown was this: Would the abilities measured by the tests be recognized by school and college teachers as genuinely important? And the third: Would the tests of developed ability forecast a student's college performance as well as, or possibly even better than, the Scholastic Aptitude Test and the regular Achievement Tests,

It was the presence of these unknowns that prompted the Board's officers to keep the Tests of Developed Ability pretty strictly under wraps until the experimental forms had been produced and some solid research findings had become available. Now, in 1957, the tests are in being, most of the research has been done, and the wraps are being removed. In the ensuing article Mr. Coffman tells how the experiment has worked out over the past four years.

## *Development of the tests*

BY WILLIAM E. COFFMAN

The program of test development and research set in motion by the reports of the initial survey committees of the Tests of Developed Ability has been an unusually thorough one. The work has been under the direction of three working committees with Henry W. Bragdon of Phillips Exeter Academy as chairman of the social studies committee, Professor Denham Sutcliffe of Kenyon College as chairman of the humanities committee, and Professor I. Bernard Cohen of Harvard University—and later Professor Ina M. Granara of Simmons College—as chairman of the science committee. They have been assisted at all stages of the study by specialists from Educational Testing Service.

The working committees spent two years in developing the tests. Where the typical College Board committee meets once a year to look at the work of its members, approve final forms of new tests, plan pretests, and resolve

differences, these committees met two or three times a year. They spent long hours in refining their definitions of the abilities to be measured and in creating ideas for test items. They subjected individual test questions to detailed review and revision until they were agreed that they had succeeded in creating tests which actually required students to use the abilities in order to give the correct answers.

Committee members tried out their questions on their own students to test the validity of their hypotheses, and at times they asked the ETS staff to conduct special analyses to check their judgments. To learn how the items performed under special conditions, they asked for special item analyses based on carefully defined representative samples of students—separate samples of tenth graders and of twelfth graders to determine whether the abilities they were measuring actually developed during the secondary school years;

separate samples of public school students and of independent school students to provide a safeguard against the presence of special biases in the questions. They sent their pretests to panels of school and college teachers with a request that the teachers examine each item in relation to the specifications and judge how successful they had been in developing questions which seemed reasonable. They approved a special statistical analysis of the panel ratings to verify the validity of conclusions based on a subjective examination of the data. They divided the questions into sub-groups and studied the intercorrelation of scores

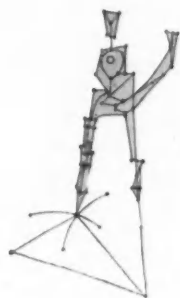


William E. Coffman, associate director of the test development division of Educational Testing Service, has worked on the Tests of Developed Ability for the last four years.



to determine what differential scores might be required. It is doubtful that any new test has been subjected to so comprehensive an evaluation prior to its use in a testing program.

The complexity of the undertaking precludes a detailed report of the intermediate findings, of the various



false starts and subsequent changes in direction which led to the experimental forms as they now exist. One aspect of the preliminary research that does merit special attention, however, is the use of panels of reviewers.

To a certain extent, any test which involves achievement, whether it involves achievement in the narrow sense of knowledge of particular subject matter or achievement in the broad sense of developed ability, is valid to the extent that competent judges conclude that the test questions require the student to have the desired knowledge or ability in order to make correct responses. A carefully constructed examination, then, becomes its own criterion; it constitutes better evidence of a student's accomplishment than the informal tests and uncontrolled observations which often determine teachers' judgments. To some extent it may fail to require the actual behaviors which are the expected outcomes of instruction, but, to the extent that the test builders are skilled, the test comes nearer to supplying convincing evidence than does any other single source.

Of course, this "content validity" depends on the adequacy of the sample of judges. The typical Board committee of examiners is carefully chosen to insure that judgments are representative of those which might be expected from a larger sample of "competent judges." It is chosen to be representative of the value systems existing within an academic field and of the educa-

tional levels concerned with test results. Experience has indicated that the judgments of a Board committee for a particular academic field are acceptable to their colleagues.

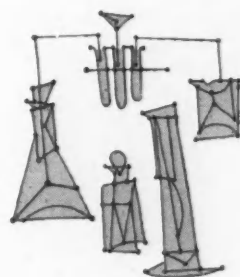
But the committees for the Tests of Developed Ability were covering broad areas of subject matter and trying to write new types of questions. They were not content to depend on their own judgment that the abilities they had identified were sufficiently comprehensive or that the questions they had written were sufficiently demanding to serve as valid criteria of developed ability. To verify their judgment, they submitted their statements of objectives and their test questions to representative panels of secondary school and college teachers. Each panel member was asked to do four things: (1) to examine the statement of abilities in the area and to rate each ability for importance, (2) to add to the statement any ability which he felt had been overlooked, (3) to classify each item according to the ability it seemed to be measuring, and (4) to rate each test question in terms of its importance as a measure of developed ability. Each committee member made the same kinds of systematic judgments. All of the judgments of committee and panel members were then analyzed for evidence of differential clusters of opinion.

The most significant outcome of this aspect of the study was that the panel judgments confirmed the committee judgments. In general, there appeared to be a high degree of agreement that the tests were acceptable. The opinions which appeared in the analysis had already been voiced by the committee members. For example, the social studies committee had agreed that an essay section should be added to the test, and the panel members concurred. Some members of the social studies committee felt that items requiring the student to draw inferences from data where all of the essential information was contained in the test item were particularly valuable, and a cluster of panel members agreed with this position. One of the members of the humanities committee felt that the art items failed to tap all of the essential abilities in the field of art; a cluster of panel members agreed but was able to offer no new ideas about how the abilities might be

measured. Both committee members and panel members in the science area concurred in the judgment that the statement of abilities needed revision to eliminate overlap. In offering the experimental tests as promising measures of developed ability, the committees recognize limitations; at the same time, they have confirming opinion that the tests appear acceptable to a representative sample of their colleagues. The unsolved measurement problems are those they have already faced during the period of test construction; no new problems were identified by the panels.

### *What the tests are like*

Short of a fully detailed examination of the 75 pages of the experimental forms of the Tests of Developed Ability, it is difficult to obtain a clear picture of the nature of the tests. It might be possible to present illustrative items, but single items or even single sets of items fail to mirror adequately a test. It is only as one sees the whole test that he recognizes the ingenuity of the test maker in probing the depths of the student's skill and understanding. In the short space available here, it seems more

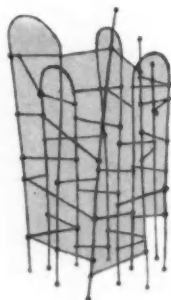


fruitful to attempt a general description of each test and to indicate the abilities which are being tested.

The experimental form of the social studies test consists of a 100-item objective section requiring 80 minutes and an essay section requiring 40 minutes. Separate scores are reported for the two sections. In the objective section, some of the items are single, multiple-choice items testing understanding of important concepts, terms, relationships, and trends in the social studies—items testing the student's understanding of the significance of important historical figures, of key events

in the development of Western culture, of happenings which form the roots of present-day problems. The student also answers sets of multiple-choice items based on data such as he might encounter as a college student or intelligent citizen—two editorials to be analyzed and compared, real and imaginary maps to be interpreted, selections from current articles to be placed in historical context, cartoons to be criticized and explained, graphs to be read and related to events studied in courses in history or economics. In the essay section, the student is presented with two short quotations and is asked to discuss one of them. In answering the question he is expected to (1) analyze the statement, (2) present arguments in support of the statement, (3) present arguments against the statement, and (4) present and justify his own conclusions.

The committee had identified five abilities they wished to measure: (1) the ability to recall basic facts and terms, (2) the ability to perceive relationships among facts, terms, concepts, and trends, (3) the ability to draw inferences when the factual background is given with the questions, (4) the ability to draw inferences when the



student must apply understandings and information from his own background to the problem presented in the test, and (5) the ability to reveal understanding and knowledge in clear and coherent language. Objective questions were designed to measure the first four of these and the essay questions to measure the fifth. The pretest analysis revealed that the abilities measured by the objective questions were so highly interrelated that a single score was justified and that the questions designed to require application of knowledge and skill (ability 4) were

the most efficient in measuring the composite ability. The final form, then, was made up primarily of these "composite" items; however, since some of the pretest items which were designed to measure abilities (1), (2), and (3) were judged to be excellent, these were also included in the final form.

#### *Why an essay was included*

From the very beginning the committee has been aware of the difficulty of securing reliable measurement from a single essay, but they have felt, and the panel agreed with them, that the essay is justified as an indication of the importance of ability to write on social studies topics even if the measurement is unreliable. They point to the generally low scores students made on the essay section in the experimental administration of the test as an indication of a lack in the students' background. They feel that the presence of an essay section in the examination will encourage secondary school teachers to require more writing in social studies classes. They accept the evidence of low reader reliability for the essay as a challenge to further effort rather than as a defeat. And they recognize that even this relatively unreliable test may be proved to have significant validity in the special studies now in progress.

The humanities test consists of a 100-item multiple-choice section requiring 30 minutes; a 12-item music section based on a tape recording and requiring 20 minutes; and a 64-item, 70-minute section of multiple-choice questions based on material from literature and art. Two scores are reported, a "references" score based on the first section and an "abilities" score based on a total of the final two sections.

It has been the hypothesis of the committee that the first section of the test reflects primarily the student's breadth of experience in the humanities—that the number of specific works or authors or titles or characters or objects is unlimited, but that a stratified sample covering different countries and different times would reflect the extent of a student's acquaintance with such materials. They have recognized the danger of encouraging the student to drill on lists of specifics but warn that in any operational use of the

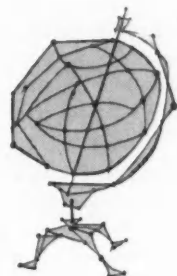
test the questions would be changed from year to year and that they are specifically constructed to make simple memory ineffective. Thus, they do not ask the student to pair *Moby Dick* with *Melville* or with *whale* or with *New England* but rather with a *quest*. The rationale behind the test is that the student with a broad background has a context within which to consider new works in literature, music, or art. Both pretest and final form analyses indicate that this section is sufficiently different from the other sections to study as a separate score.

The "abilities" sections of the humanities test contain questions designed to test what the committee has called the ability to comprehend—to see form and purpose behind words, paint, stone, and sound—and the ability to discriminate—to discern similarities and differences between poems or lines of poems, between paintings, and between musical selections. Since both ability to comprehend and to discriminate develop as a result of extensive practice in reading and looking and listening, and in relating the unknown to the known, the student with wide experience should be better able than one with limited experience to answer questions about new art objects. The committee recognizes, however, that a certain element of native ability is involved, that is, that some students begin their experience with more ability to perceive than others. They have, however, placed most emphasis on questions which call upon acquaintance and experience.

The humanities committee has also investigated the use of an essay examination, but they have made this phase of their investigation a separate study in order to preserve the two-hour testing period for the other material. The essay experiment provided for a special design which permitted a comparison of the relative difficulty of two questions. Students were asked to select one of the topics and to write on it. At the end of 30 minutes the students were asked to write on the other topic. Since in ordinary circumstances it is expected that students will write on only one topic, their first essay is being used for a validity study, but the second essay was also scored to provide information about the relative popularity and difficulty of the two topics.

The two topics proved to be about equal in popularity and difficulty. Too, scores were generally higher for first-choice essays than for second-choice essays. Whether or not the essay scores will provide information beyond that obtained from the regular two-hour humanities test will be known when the validity studies are completed.

The science test consists of two parts. The first is a 60-item, multiple-choice "glossary" section requiring 30



minutes and covering understanding of the basic forms and concepts in the six areas of science from which problems were selected—physics, chemistry, biology, meteorology, astronomy, and geology.

The second part is a 70-item, multiple-choice section requiring 90 minutes and covering the ability to apply scientific facts and principles to the understanding of data such as one might encounter in further study of science in college or in life. The answers to the questions require in many cases the application of quantitative thinking, particularly in the understanding of graphs or in the reading of tables. The basic steps in scientific thinking are applied in reaching conclusions from descriptions of experiments. The student is required to reason scientifically as he predicts the effect of certain treatment. He is required to apply scientific generalizations to specific situations. In all cases, the student must have some knowledge of basic scientific methods and concepts in order to reach correct answers to the questions. The problems are deceptive in that they often appear to be simply reading problems, but a careful analysis reveals that the passages, which appear simple to one with training in science, seem to have little meaning for one without scientific training. Reports from the experimental admin-

istrations indicate that many students who had taken no courses in science were unable to make progress with the questions.

It is the belief of the committee that the student who does well on the test is ready to study college courses in science even though his specific background of information might be limited. They feel that by making a high score on the test he has demonstrated a solid background of basic scientific understanding and ability.

The first phase of the research on the Tests of Developed Ability has demonstrated that committees are able to agree on definitions of developed ability in the three areas and to construct test questions which are acceptable, not only to themselves, but also to representative panels of school and college teachers. Detailed statistical studies based on administrations of pretests have indicated that reliable experimental tests can be constructed, that certain sub-scores are justified, that the tests are equally fair to students from public and independent secondary schools, and that the expected growth in ability actually occurs between grades 10 and 12. The first phase of the research did not provide information about the relationships among the tests in the three areas since the studies of each area were carried out on independent samples. Furthermore, it did not indicate the relationship between test scores and

indices of practical importance such as quality of previous educational experience or of future scholastic performance. The conditions met in the pretest phase are necessary for an acceptable admissions test but they are not sufficient.

The second phase of the research involves extensive field trials of the experimental tests. In May 1956 the tests were administered to over 3,000 secondary school seniors in 42 different schools, both independent and public, in all parts of the United States. In September, almost 5,000 freshmen in 11 different colleges took the same tests. The data are now being analyzed.

Results of a study of the intercorrelations of the six Tests of Developed Ability scores and the two Scholastic Aptitude Test scores (Verbal and Mathematical) are already available and appear in the accompanying table. They confirm the expectation that the several tests are providing reliable and relatively independent measures—an indication that most of the TDA scores are more independent than the two SAT scores and hence hold more promise than the SAT for distinguishing among students whose likelihood of success in college will vary among prospective major fields of study. Further, and with the possible exception of the Social Studies tests, the intercorrelations of "like" TDA scores tend to be higher than the intercorrelations of "unlike" scores; e. g., Science Abilities corre-

### Reliabilities and intercorrelations of TDA scores and SAT scores<sup>1</sup>

	SAT-V	Soc. Stud. Abil.	Hum. Ref.	Hum. Abil.	SAT-M	Sci. Abil.	Sci. Gloss.	Soc. Stud. Essay
SAT-V	.93 <sup>2</sup>							
Social Studies Abilities	.75	.92 <sup>2</sup>						
Humanities References	.72	.70	.92 <sup>2</sup>					
Humanities Abilities	.67	.59	.66	.83 <sup>2</sup>				
SAT-M	.65	.58	.47	.49	.89 <sup>2</sup>			
Science Abilities	.65	.62	.46	.53	.73	.92 <sup>2</sup>		
Science Glossary	.53	.49	.42	.41	.57	.77	.88 <sup>2</sup>	
Social Studies Essay	.43	.48	.41	.33	.32	.33	.26	*
Mean	501	52.3	45.1	38.9	539	40.2	32.0	8.13
Standard deviation	109	15.5	15.5	9.1	111	12.2	10.2	6.2
Standard deviation (reliability sample)	103	16.2	15.6	9.5	106	13.2	10.3	6.3

<sup>1</sup>Boys, validity study sample 1,276 cases, spring 1956.

<sup>2</sup>These reliability coefficients were calculated on different samples from those used for computing the correlations.

\*No reliability coefficient is available for the Social Studies Essay. The average reader reliability was estimated to be between .52 and .76.



lates higher with Science Glossary than with Humanistic References. This suggests that, whatever the new tests are measuring, each Test of Developed Ability is contributing something unique to our understanding of the individual student. It will be observed that the correlations of TDA scores with the appropriate SAT scores are relatively high, e.g., the correlation between Social Studies Abilities and SAT-V is .75; the correlation between Science Abilities and SAT-M is .73. This means that we are not likely to find better general prediction of college success with the Tests of Developed Ability than we now have with the SAT, although there is no reason why it should not be as good.

### *How they compare with the SAT*

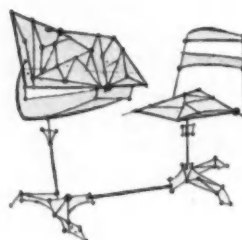
Our tentative conclusion from these early data is that the Tests of Developed Ability are likely to be better discriminators than the SAT of success in different major fields but that they are not likely to improve our overall prediction of college success. A major purpose of the detailed analysis now under way is to determine whether the new measures can help us to identify students with special abilities in the social studies, the sciences, or the humanities not now identified through the use of SAT-V and SAT-M. If they can, guidance counselors will be provided with a very useful tool and admissions officers may be able to increase the accuracy of their predictions in different major fields.

At the time the tests were administered to secondary school seniors in May 1956, each student filled out a questionnaire indicating his father's occupation, his hobbies, his reading interests, his high school course pattern, his judgment concerning his performance on the tests, and other information thought to be related to performance on the tests. From each school information was obtained about the scholastic records of the students and judgments of teachers concerning their developed ability in each area. In the social studies area a special questionnaire provided information about the teaching practices followed in the high school courses.

If the Tests of Developed Ability provide the kinds of measures they are

intended to provide, the profiles of test scores should be reasonable in terms of the students' backgrounds of experience. The students judged high in developed ability in social studies should tend to make higher scores on the social studies test than students judged low in ability. Students who have been given practice in writing about topics in the social studies should make higher scores on the social studies essay than students who have received little practice in writing. Students with scientific hobbies should make higher scores on the science test than students with no expressed interest in science. Students who enjoy attending concerts or visiting art museums should have their interests reflected in higher scores on the humanities test than students with little interest in the field of humanities.

It will be evident from this brief description that we are dealing with a highly complex set of data and that the number of possible comparisons is astronomical. A crucial step in the analysis is the verification of findings through a process of cross-validation since it is not possible to control rigorously the many possibly significant variables. The procedure being used is to divide the sample in half so that the first half may be used to develop hy-



potheses and the second half to check them. When the analysis is completed it should be possible to make some definite statements about the relationship of scores on the Tests of Developed Ability to factors of experiential background and to provide users of the tests with guides to the valid interpretation of scores.

The test scores of the freshmen in the 11 colleges will be related to each other, to SAT scores, and to scores on the Achievement Tests where available. All test scores will be related to course grades during the first semester of the

current academic year. If the results are promising, further study may be undertaken using subsequent course grades.

In the preceding article Mr. Dyer has reported the considerations which led to the attempt to construct Tests of Developed Ability. We are now approaching the end of the period of experimentation. A number of possible outcomes of the research are recognized. The tests in their present form—three two-hour examinations with six scores reported—may prove highly satisfactory as entrance examinations. In this case they could be introduced into the Board examination program as a substitute for some or all of the present tests.

A second possibility is that the three abilities scores may prove quite useful but that the scores for science glossary, humanities references, and social studies essay contribute little information of significance. At the same time, it may appear that the tests do not contribute sufficient information about developed ability in the mathematical area or in the area of English expression. In this case, a battery of five 90-minute tests might be considered—the three tests in social studies, humanities, and science and two additional tests, one in mathematics and one in English expression. The student might then be directed to take four of the five tests depending on the program of studies he expects to follow in college.

A third possibility is that the Tests of Developed Ability may prove satisfactory for some colleges and some curricula but not for others. In this case the tests might be offered as an alternate to the current program for institutions wishing to adopt them.

Finally, the tests may prove less useful than current tests, particularly in relation to the cost of preparing and administering them. In this case, it may prove feasible to incorporate the more promising features of the Tests of Developed Ability into current SAT or Achievement Tests.

The hope is that definitive data will be available in the spring of 1957 and that a start can be made on the detailed discussion, planning, and conferences with potential users which must precede any final decision regarding the future of the Tests of Developed Ability.



## Which ones would you admit to college?

Readers are invited to review the admissions data on six students and decide whether to admit or reject them

On the following pages are presented descriptions of six young people. Although they portray fairly vivid pictures of the young men and women, these descriptions are not at all literary either in form or in purpose. Rather, they convey the kinds of information on which college admissions officers must base the momentous decision—momentous both for the college and the young person described—of whether or not to admit him to college.

This decision is of course always made relative to a particular college—its size, interests, traditions, standards, program, basic purposes, and a host of other considerations as seemingly infinite and subtle as those which arise in weighing the nature and promise of an individual human being. Two particular colleges to which the six persons described might apply for admission are also characterized below.

Although these two colleges, one for men and the other for women, are not actual institutions, they do resemble closely a number of real colleges. And although their identities are disguised, the six young people—three girls and three boys—are actual persons who did apply to and attend colleges much like those described.

The reader is being introduced to these young people and to the hypothetical colleges of their choice so that he may play the roles of the colleges' admissions officers. In so doing, he is invited to review what was known of each candidate at the time he or she applied for admission and then to decide in each case whether to admit or reject. The girls are of course to be considered as applicants to the women's college and the boys to the men's college.

After making these decisions, the reader may then compare his implied predictions for the applicants with the brief reports on how they actually fared in college, given on page 32.

Another and possibly more comforting standard of comparison for the reader's judgments is also provided. These six candidates were among 20 considered in a larger exercise, of which the one given here was part, by participants at the Fourth Colloquium on College Admissions of the College Board, held last October. For the exercise the 66 college admissions and 30 secondary school officers at the Colloquium were organized into 10 "admissions committees." The committees'

decisions on these six boys and girls with respect to the two colleges are given at the end of the summary of each student's actual performance in college.

A report on the entire Colloquium exercise will appear in the forthcoming volume of Colloquium papers, to be published this spring as *College Admissions No. 4*. Readers who complete the part of the exercise presented here should be reminded, as were those who reviewed all 20 cases at the Colloquium, that "the assessment of applicants is a very difficult task."

### *The women's college and its applicants*

*The women's college* is a liberal arts college located in the suburbs of a large city. Of its 1,200 students, 65 per cent come from independent schools and 35 per cent from public schools; its applicants outnumber by four the 375 places in its entering class. The average Verbal score made by its entering class on the College Board Scholastic Aptitude Test is 600; the average Mathematical score, 560.

*Alice* lives in a town of about 6,000, 500 miles west of the Atlantic Ocean. She attends the local high school. Her father is a merchant in town. Both parents had a small amount of college work but did not receive degrees. Alice has a brother one year younger than she who is also attending high school. She will be 18 in June of her senior year and thinks she would like to major in chemistry. Alice's paternal aunt attended the women's college.

An alumna of the women's college who had attended Alice's high school has written recommending Alice. The alumna had found the change from high school to college difficult but she had confidence in Alice's being able



to do it. The last student to enter the women's college from Alice's high school did so 16 years ago.

Alice's ninth grade Otis IQ was 118. Her scores on the College Board examinations were: SAT-VERBAL, 403; SAT-MATHEMATICAL, 377; English Composition, 404; Latin, 414; Chemistry, 420.

Alice was elected vice president of her high school's student government body and president of its club council. She was a Mariner Scout and active in dramatics, the social service organization, orchestra, band, and choir, and had had private violin lessons for six years.

Alice's college interview report reads: "Small in stature. Shy, twitchy but relaxed as we discussed our mutual friend, the alumna, and also Alice's alumna aunt. Has not found high school work especially hard."

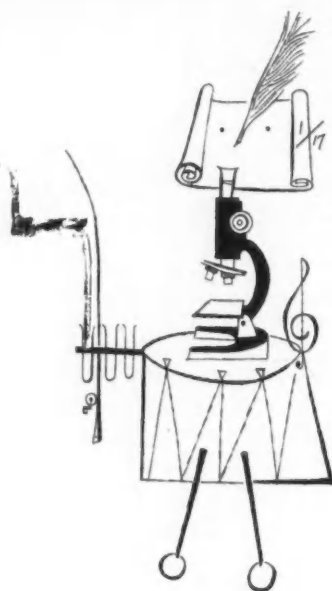
At the high school Alice attended, A is an honor grade, D is passing. Her school grades are as follows:

Subject	9th	10th	11th	12th
English . . . .	B	A	A	A
Latin . . . . .		A	A	A
Algebra . . . .	A			
Geometry . . . .		A		
General science .	A			
Biology . . . .			A	
Chemistry . . .				A
Social studies .	A			
World history .		B		
American history				A

The personal recommendation from Alice's school states: "Outstanding senior. Commendable record. Valedictorian in class of 83. Noteworthy extracurricular record. Interested in science. Respected by teachers, students. Thoroughly good young lady with plenty of ability. Completely trustworthy. Follows through."

Diana lives in a suburban community near a large city in the East. Her father attended business school and is a banker. Her mother attended a small southern college. She is an only child and will be 17 years and three months at college entrance. Chemistry is her favorite subject and she thinks she would like to major in it. She attends a public high school with an excellent reputation which has sent very good students to the women's college.

Diana's test scores were as follows: tenth grade American Council on Edu-



cation-Linguistic (ACE-L), 94th percentile; ACE-Quantitative (ACE-Q), 96th percentile; eleventh grade Otis IQ, 132. Her College Board scores were: SAT-V, 688; SAT-M, 600; English Composition, 736; Spanish, 660; Chemistry, 550. She ranked in the top 10 per cent of a class of 100.

Diana's extracurricular activities included team sports, swimming, reading, writing, music, and baby-sitting. She belonged to the dramatic club, the fishing club, and the honor society, and was vice president of the Spanish club.

Diana visited the campus early in her senior year and spoke briefly with the office secretary. Aside from that there is no interview report on her.

The honor grade at Diana's school is 90; 70 is passing. Her grades are listed below.

Subject	9th	10th	11th	12th
English . . . .	85	93	91	93
Latin . . . . .	90	98		
Spanish . . . .		95	93	94
Algebra . . . .	90			
Geometry . . . .		94		
Trigonometry . .			77	
General science .	90			
Biology . . . .		88		
Chemistry . . .			89	
Social studies .	85			
World history .			92	
American history				72

The report from Diana's school comments: "Excellent student; attractive; good citizen. Can do even better with

strong competition. Interested in science. Well-liked, well-balanced, average in leadership. Somewhat self-centered, but has made progress in overcoming it. Preferred another teacher in history but stuck it out and with good attitude. Vivacious."

Grace lives on a small farm in a midwestern town with a population of 300 in the middle of nowhere, and attends the town high school. Grace's mother attended college in the Midwest for two years; her father has a B.S. and M.S. from a midwestern university and teaches agriculture. Grace has a brother aged 17, a sister of 15, and three little brothers whose ages are six, four, and one. Grace will be two months short of 18 at entrance. She wishes to enter the field of international relations in a government position.

The admissions office has had no previous experience with the school; indeed, no member of the committee had ever heard of the town. Grace attended grades 9 and 10 in another small high school in a nearby state.

Grace's College Board test scores were: SAT-V, 671; SAT-M, 594; English Composition, 625; Social Studies, 661; Biology, 600. She ranked first in a class of 17.

Coeditor of the school publication, Grace also participated in the Drum Corps and was a member of the Student Council and the Quill and Scroll society. In her junior year she won third place in the county bookkeeping contest. She enjoys gardening and church work. As the oldest in the family, Grace has had many home responsibilities, especially the care of younger children. She has never been East.

There is no interview report on Grace. No honor grade is listed for her school; D is the passing grade. Grace's school record follows.

Subject	9th	10th	11th	12th
English . . . . .	A	A	A	A
Applied mathematics	A			
Algebra . . . . .		A		
Geometry . . . .				A
General science .	A			
Biology . . . . .		A		
World history . .		A		
American history .			A	
Problems of democracy . . .				A

Grace's school reports, "Very high

type student. Has definite qualities of character. Industrious. Organizes work well. Fine ability. Stable."

### The men's college and its applicants

The men's college is a liberal arts college located in a country town. Of its 800 students, 60 per cent come from public schools and 40 per cent from independent schools. There are five applicants for each place in the freshman class of 225. Fourteen intercollegiate sports are offered. For entering students the average SAT-V score is 580; the average SAT-M score is 600.

Art lives in a small suburb of a medium-sized city in central New York State. He is the son of a doctor who works for the state in one of its departments. He has three sisters, one of whom is older than he. Art wants to go into the ministry on graduation. His age on entering college will be 18 years and four months. Both his parents are college graduates.

About 50 per cent of the graduates of Art's home town high school go on to higher education.

Art's College Board test scores were: SAT-V, 616; SAT-M, 765; English Composition, 652; Social Studies, 614; Chemistry, 510.

Art was president of his junior class, a member of the student association for sophomore, junior, and senior years, a varsity track letter winner, and in the drama group.

An alumnus of the men's college who knows Art reports: "Fine Christian gentleman. Will be a credit to the college."

At Art's school, 90 is an honor grade; 75 is the college certifying grade. His school marks follow:

Subject	9th	10th	11th	12th
English . . . .	73	90	80	83
Social studies . .	83	90	81	90
Algebra I and II .	95			
Plane geometry .		95		
General science .	73			
Biology . . . .		89		
Latin . . . . .		93	85	
Chemistry . . . .				91
Public speaking 1/2			79	
Typing . . . . .				86

Art's school principal reports: "This boy has broad interests which keep him pretty busy and at times tend to

dissipate his energies in too many directions. Likable, dependable boy who is a reliable member of our community. One who is willing to assume and discharge his responsibilities. We recommend him highly as a prospective student at your college and feel that he will do credit to his high school as a college student."

Diz lives in a small New England city where he attends the local high school. Neither his father nor his mother has had a college education. He is an only child and wants to be a doctor. His age on entering college will be 17 years, six months.

Diz attended a large high school. About 20 per cent of its graduates went on to college.

Diz's test scores were: tenth grade Otis IQ, 122; SAT-V, 542; SAT-M, 586; English Composition, 600; French (three years), 565; Social Studies, 678. He ranked twenty-third in a class of 318.

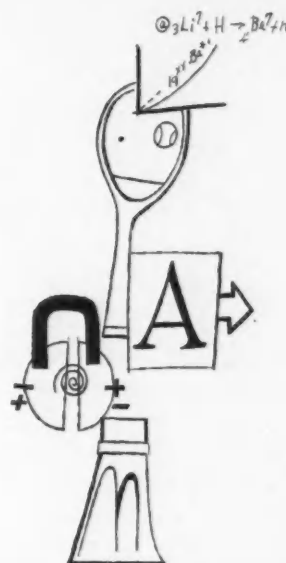
Diz was co-captain of the school football team. They played another high school in a postseason bowl championship game. He was treasurer of the senior class and sports editor of the yearbook. He was also on the track and basketball squads.

There is no interview report on Diz. At Diz's school 90 is the honor grade, 80 is passing. His school grades were:

Subject	9th	10th	11th	12th
English . . . . .	A	90	90	86
Latin . . . . .	A	92		
French . . . . .		90	90	90
Algebra . . . . .	B	88		
Geometry . . . .			88	
Trigonometry 1/2 .				88
Solid geometry 1/2 .				88
Social studies . .	A		94	96
Science . . . . .	A			
Chemistry . . . .			90	
Physics . . . . .				92

Diz's school principal reports, "A boy of excellent character, good home environment, needs financial assistance. As co-captain of the football team he showed fine leadership and ability to think for himself under pressure. Gets along well with teachers and students. Has definite goal in mind and works toward it. I recommend him highly."

Gap lives in a suburb of a medium size city in Michigan. His father is a law-



yer. There is no record of his having any brothers or sisters. His occupational goal is physics or some science. Both his parents are college graduates. He will be 18 at college entrance.

Gap graduated from a small suburban high school. Approximately 70 per cent of its graduates go on to college.

Gap's test scores were: tenth grade Otis IQ, 139; eleventh grade ACE-L, 99th percentile; ACE-Q, 97th percentile. His College Board scores were: SAT-V, 706; SAT-M, 800; English Composition, 727; Physics, 800; Social Studies, 661. Gap ranked first in a class of 66. He won letters in tennis and swimming.

There is no interview report on Gap. The honor grade at his school is B. His marks follow.

Subject	9th	10th	11th	12th
English . . . . .	A	A	A	A
Algebra . . . . .	A	A		A
Geometry . . . . .			A	
Trigonometry 1/2 .				A
Latin . . . . .	A	A		
Social studies . .	A		A	A
Chemistry . . . .			A	
Physics . . . . .				A
Speech . . . . .		B		

Gap's school principal reports: "This is an extraordinary young man; brilliant student without making any extraordinary effort to excel. Conscientious, original, intelligent. He has a rather quiet manner but a tremendous note of determination. Unqualifiedly recommended."

continued on page 32

## *Financial aid—from application to award*

### **An analysis of the characteristics of 95 college scholarship programs and their candidates**

Every college knows, or can identify without too much effort, the unique aspects of its interrelationships with its own candidates for financial aid. Each college participating in the College Scholarship Service is also able, because of the Service's Consolidated Reports, to identify and describe certain characteristic aspects of the interactions of its financial aid program with those of other participating colleges with which it has candidates in common. The extent of this kind of association with other colleges is therefore determined by the college choices of candidates rather than the interest of the institutions in receiving all available information on financial aid policies and practices. The individual CSS college does not learn from its Consolidated Report whether its interactions with candidates and the limited number of other colleges to which they apply are typical or atypical of CSS college aid practices as a whole. The Service has therefore attempted to describe the general characteristics of this total college-candidate interaction.

In the 1954-55 academic year, 19,300 young people, of whom two-thirds were men, filed a CSS Parents' Confidential Statement with instructions to send copies to one or more of the 95 participating colleges. This group was above the average in academic ability as measured by the Scholastic Aptitude Test, 63% of the men and 69% of the women receiving SAT-VERBAL scores above 500, and 90% of the men and 94% of the women scoring above 400.

The predominance of men in the candidate group corresponded closely with the composition of the entering classes of the institutions participating in CSS' first year. In those colleges,

35.8% of the available places were in men's, 15.2% in women's, and 49% (30.9% men, 18.1% women) in coeducational institutions. Two-thirds of the candidates were men; two-thirds of available places were for men.

A total of 41,519 copies of the form, or an average of 2.17 colleges per candidate, were ordered by the 19,300 students; 46% of the candidates sent copies to only one college, 22% to two, 18% to three, 7% to four, and 7% to five or more colleges. The proliferation record was 22 colleges.

#### *Rate of completed applications*

To what extent did candidates complete their credentials at the colleges to which they sent copies of the form and become applicants at those colleges? What was the relationship between places available for entering students and requests for financial assistance as reflected by actual applications for aid? Eighty-three per cent of the copies sent to CSS colleges became bona fide applications for financial assistance. Candidates who sent copies of the form to the 32 women's and coordinate colleges completed their credentials on the average over 93% of the time, while at none of the coeducational or men's colleges was this high a percentage ever reached.

Men, representing two-thirds of the individuals seeking financial aid, made 71% of the completed applications, 49% at men's and 22% at coeducational colleges. Women, on the other hand, directed almost half of their applications to coeducational colleges and the rest to women's colleges. The women, then, seemed to seek aid very much in relation to the spaces available

to them in the entering classes, while the men tended to apply somewhat more (in relation to actual capacity of the classes) to the men's than the coeducational institutions. These findings may, of course, merely reflect actual or assumed financial aid opportunities; there may be more aid opportunities for men in men's than in coeducational institutions, while the opportunities for women may be about the same in coeducational and women's colleges.

Although the overall chance that a copy of the Parents' Statement would become a completed application for aid was quite good, it was not nearly as likely that the application would receive at least one offer of college aid. The 34,461 actual applications produced 11,626 offers, or roughly a third of the number of bona fide applications. For men as a group, the proportion of offers was 32%; for women, 38%.

Three patterns of institutional response were noted: 13% of the institutions offered aid to half of their applicants, 55% to considerably less than half, and 32% to considerably more than half. Since the general trend was to offer aid to only about a third of those applying, as noted above, these deviations from the average are of some interest. It is impossible to characterize as a group the colleges which



Rexford G. Moon, Jr., Assistant Director of the College Board, has supervised College Scholarship Service activities since June 1955.



offered aid to half and denied it to half of their applicants. Some were large, some small, some well known, others not as well known. However, those which offered aid to considerably more than half of their applicants were predominantly of two types, "low cost" coeducational institutions and "high cost" women's colleges, although it must be emphasized that all of the colleges of these types did not fall within this group<sup>1</sup>. Undoubtedly such factors as the demand for aid in relation to available resources, the average size of offer, the rate of scholarship attrition, etc., would produce this phenomenon.

If we classify the CSS colleges according to type and cost of institution and consider the extent to which applications resulted in offers in each college category, some interesting comparisons may be observed (see accompanying table). The best chances (% of applications receiving offer) for an offer of aid, for both men and women, were at low cost coeducational institutions. Applications by men and women at high cost coeducational institutions were the least likely to receive an offer. Generally speaking, the data, considered alone, would suggest that an application by a man to a men's college had equal likelihood of receiving an offer at a low, middle, or high cost college. A woman on the other hand had a better chance of receiving an offer if she applied to a middle cost women's college rather than a high cost women's college. Shortly, we will consider what effect other variables such as scholastic ability and number of applications had on the likelihood of receiving an offer.

Another characteristic of application behavior revealed by the data was the difference in number of applications made by men and women. More men (24%) than women (17%) made three or more applications. Moreover, though the difference was quite small, the public school men were more multiple application conscious than their brethren from independent schools, while the reverse was true of the women.

The parents of the total applicant group came predominantly from two

### The sources of information

During the 1954-55 college year, 95 member colleges of the College Board agreed to participate in the College Scholarship Service in a cooperative effort to improve their financial aid procedures and to study institutional and candidate practices in this increasingly important area of education. Each participating college (1) required all entering aid applicants to file with CSS a special financial information form called the Parents' Confidential Statement, and (2) reported to the Service the actions it had taken on the applications. The Service produced a Computation Manual to help colleges use the PCS and, in addition, prepared Consolidated Reports based upon the college reports, showing each college the actions other participating colleges had taken on the applications of candidates they had in common. The Consolidated Reports, together with the data available in the PCS, student expense budgets submitted by the colleges, and Board test scores have been the main sources of data for a number of studies, one of which is summarized in these pages.

Concerns about scholarships and financial aids are of relatively recent origin. One need only look in the literature of higher education of the last five years to find nearly everything of significance that has been done or said about financial aid, and these writings, in the main, have been directed toward proving that more financial aid opportunities are needed. Since little if any attention has been given the actual interaction between college and candidate, the relationship between available and needed or sought financial aid, CSS chose this as one area of research and has pursued the interrelationship problem with great interest.

In planning and carrying out all its research, the Service has been dependent upon and has benefited greatly from three principal sources: the CSS Committee and its subcommittee on research chaired by Charles C. Cole, Jr., assistant dean of Columbia College; the many college officers who have offered suggestions and criticisms that have improved the Service; and the staff of the Educational Testing Service, including as most important contributors William G. Mollenkopf and his colleagues in developing and completing this work, Marjorie A. Olsen and Robert E. Dear.

occupational groupings: professional (20%), and business-executive-administrative-supervisory (30%). Another 20% of the applications came from the large parental job classifications of skilled, semi-skilled, and unskilled labor. The women's colleges, considered alone, receive 57% of their applications from the professional and business groups and only 13% from the large labor category. The income of the parents of male applicants averaged about \$6,800 per year, while the parents of female applicants averaged \$7,500.

In addition to studying the effect which expense and type of institution had on the likelihood of receiving an offer, CSS also investigated such factors as scholastic ability, number of appli-

cations made, parental occupation, type of secondary school attended, and sex of applicant. The relationship between these factors and the average size of college offers was also noted wherever possible.

The likelihood of a candidate's receiving at least one offer was very decidedly related to scholastic ability (as measured by the SAT-VERBAL score), and to the number of applications made by the candidate. (See Figures 1, 2, 3, 4.) The extent to which a higher SAT-V improved the candidate's chances of receiving an offer was almost identical for men and women; the relationship of receiving an offer to the number of applications made, however, showed marked differences. If the SAT-V is disregarded, it may be seen

<sup>1</sup>Types and cost ranges of the colleges appear in the accompanying table.

that men improved significantly and uniformly their chances of receiving at least one offer of aid as the number of their applications increased (Figures 1, 3) whereas women's chances show insignificant improvement beyond two applications (Figures 2, 4). A man's chance of receiving at least one offer of aid increased with the number of applications made and with improvement in his SAT-V performance; a woman's improvement of chances



was almost solely dependent on improved SAT-V performance. There was, however, a tendency for a point of diminishing returns to be reached—for girls when the number of applications reached four and for men when the number reached five. Whether a male applicant came from a public or independent school seemed to have little effect on his financial aid situation. On the other hand, as a group, the women from private schools (Figure 4), apparently had more careful guidance in their college choice; a greater proportion of their single applications received offers (regardless of SAT-V scores) than did single applications from men in public or independent schools or from girls in public schools.

The data available on parental background and its relationship to the likelihood of receiving an offer and the average size of that offer are extensive. At first glance, this information does not seem to indicate any significant findings although it is possible that careful study may reveal information which can be reported at a later date.

A consideration of the average size of offers with reference to scholastic ability and number of applications submitted, shows that there was only a slight tendency for the average size of offers to increase as the number of applications per student increased and the SAT-V became larger. The fact that this relationship was slight seems to confirm the reality of one of the most important tenets of the Service. Finan-

cial need, which it may be assumed is distributed pretty uniformly over the scholastic ability range, was the factor that carried the most weight in determining size of offer. The only exception to this trend was noted for women applicants from independent schools. In contrast to other groups, the average amount of aid received by these women seemed to be related solely to the SAT-V; the larger the applicant's score the larger the average size of the offer. Whether this reflects application habits, e.g., a tendency for high SAT-V women to apply to high cost colleges (for which there is some evidence) or whether the scores are the principal determiner of both the receiving of an offer and its amount would be dangerous speculation for even the most daring researcher.

We have already referred briefly to the accompanying table and in the discussion above to the differential effects that the type of institution has upon receiving an offer. It may be noted further in the table that, generally speaking, the chances of receiving an offer were better at low cost institutions (with, of course, the exception of these institutions for men) than at high cost institutions. It was also true, however, that on the average the most expensive colleges offered the largest amounts of aid. It is clear that the chances of getting an offer were negatively correlated with expense levels, whereas the sizes of offers were positively correlated with college expense levels.

It can also be seen from the table that men's colleges as a group made the largest average offers and that coeducational college offers to men were the next largest. The offers of women's colleges and coeducational colleges to women were about the same.

Up to this point, the term "offer" has covered all forms of financial assistance tendered to all kinds of candidates by colleges of various types and expense levels. What were the various forms of aid offered to applicants and what was the response to these tenders?

Much has been said in recent years about the desirability of awarding a combination financial aid package to entering students. A greater use of jobs, loans, and different forms of remission or credit, singly or together with gift (scholarship) aid, has been

advocated. Although the aid offered to entering students by a few colleges presupposed some percentage in the form of work or some other combination, by and large the data revealed (with only one significant exception) little use of aids other than outright scholarships. It should be noted, however, that this generalization does not represent fairly the practices of certain specific institutions and that the data are the result of decisions made during 1954-55, a time when the wider use of non-gift aid to entering students was being considered by many colleges for the first time. This information, in any case, provides a description of 1954-55 practices with which those of later years can be compared. Specifically, it was found that scholarships by themselves constituted the most frequently offered aid, regardless of type of college or expense level *except* for high cost men's institutions; there, the combination of scholarship and job was more prevalent than scholarships alone. Of the total number of offers made by seven high cost men's institutions, 48% were a combination of job and scholarship, and 60% were something other than gift aid alone.

There was surprising use of the scholarship-loan combination by the middle cost men's institutions. Though only 15% of the total number of offers were in this form, and even fewer were accepted, this suggested a significant trend toward the use of loans. These middle cost men's institutions, like the



more expensive ones, made considerable use of non-gift aid or gift aid in combination with non-gift aid, though only 35% of their total offers were of this nature.

In the women's colleges, the offering of jobs in combination with scholarships or jobs alone was noticeable. These two packages together, though, never totaled more than a third of the offers made, and the proportion was considerably less at the high cost women's colleges. Loans were not popular

*Relationship of financial aid applications to offers, offers to awards, and applications to enrollees denied aid at the various types of CSS colleges (1954-55)*

	<u>Men's colleges</u>			<u>Women's colleges</u>			<u>Coed colleges (to men)</u>			<u>Coed colleges (to women)</u>		
	<u>Regular yearly expense</u>			<u>Regular yearly expense</u>			<u>Regular yearly expense</u>			<u>Regular yearly expense</u>		
	<i>Less than \$1,500</i>	<i>\$1,500-1,700</i>	<i>More than \$1,700</i>	<i>Less than \$1,500</i>	<i>\$1,500-1,700</i>	<i>More than \$1,700</i>	<i>Less than \$1,500</i>	<i>\$1,500-1,700</i>	<i>More than \$1,700</i>	<i>Less than \$1,500</i>	<i>\$1,500-1,700</i>	<i>More than \$1,700</i>
Number of Colleges <sup>1</sup>	8	16	7	6	6	19	18	15	4	18	15	4
Number of aid applications	2,525	4,703	9,633	1,040	785	3,551	1,343	4,005	2,217	1,278	2,481	900
Number of aid offers	695	1,502	2,913	464	378	1,244	781	1,315	607	657	867	203
% of applications receiving offers	28%	32%	30%	45%	48%	35%	58%	33%	27%	51%	35%	23%
Mean value of offers	\$613	\$609	\$903	\$351	\$415	\$735	\$378	\$594	\$823	\$327	\$471	\$695
Number of offers accepted (awards)												
Commuter	46	171	112	125	76	48	108	143	43	92	89	29
Resident	428	713	1,623	221	167	752	380	650	318	337	486	120
% of offers accepted	68%	59%	60%	75%	65%	64%	62%	60%	59%	65%	66%	73%
Mean value of awards												
Commuter	\$371	\$411	\$427	\$234	\$307	\$431	\$365	\$504	\$614	\$327	\$474	\$593
Resident	\$626	\$675	\$940	\$374	\$563	\$768	\$401	\$657	\$855	\$348	\$536	\$715
Number denied aid who enrolled	406	562	889	182	127	349	135	598	237	188	402	133
% of those denied aid who enrolled	22%	18%	13%	32%	31%	15%	24%	22%	15%	30%	25%	19%

<sup>1</sup>Number of colleges reported in table is greater than 95 CSS participating colleges because some participating institutions had both men's and women's colleges.

except in combination with scholarships and "other" (probably cooperative housing) and then only as less than 2% of the total offers made by high cost women's colleges.

At coeducational colleges, package offers to men and to women followed similar patterns. Here again, scholarships alone were offered most frequently, and the scholarship-job combination and jobs alone amounted to less than a third of the total number of offers.

The scholarship-job package had a larger average dollar value than scholarships alone regardless of the type or cost level of the institution. At men's institutions, the scholarship-job combination was, on the average, \$450 higher than the scholarship alone, and in the coeducational colleges this combination for men was \$300 higher. For women, both at women's and coeducational colleges, the scholarship-job combination exceeded the average

scholarship by about \$150. College officers, faced with large-scale candidate financial needs and limited amounts of available gift aid, seem to be making use of the other resources at their command. This will be one of the interesting and can be one of the most encouraging trends to watch during the next few years.

Any discussion of offers would be incomplete without reference to the extent to which different types of offers were accepted and which of them were more readily accepted than others. An accepted offer was recorded as an "award" to identify the particular offer that the applicant actually accepted by enrolling in the college and to differentiate between it and the other offers which he received but did not accept.

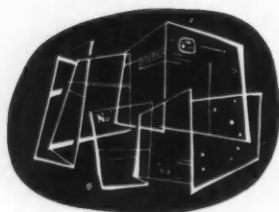
The table indicates, for each type and expense level of institution, the number (and %) of candidates who entered with awards in relation to the number who received offers but did not

enter. These percentage figures, of course, are indicative of the scholarship attrition of these various types of institutions. The lowest attrition (highest rate of enrollment) was noted for low cost women's colleges, and the next lowest for offers to women from high cost coeducational institutions. The highest attrition (lowest rate of enrollment) was noted in the middle cost men's institutions. Men's and coeducational colleges making offers to men with one exception had higher attrition figures than either the women's colleges or the coeducational colleges making offers to women.

One thing that is always a mystery to the scholarship officer is the behavior of the applicant who, having been denied aid and in spite of showing considerable financial need, still shows up at the college in the fall. The table describes this phenomenon as it operated at the various types of colleges in the study. As might be as-



sumed, applicants denied aid at the high cost institutions were the least likely to enroll, though even here 15%, on the average, still registered. In general, it may be said that the lower the expense level of the institution was, the greater was the tendency for applicants denied aid to enroll, the one exception being middle cost women's colleges where 31% of those denied aid still



enrolled. It is not possible to determine to what extent these applicants were commuters or whether in reality their failure to receive aid was due to lack of financial need or to other factors that may account for this behavior. No doubt some of them were resident students and really were in need of help; quite probably they were counting on the college to provide them with some kind of aid after their first year had been completed.

In contrast to the finding that as the number of applications increased so did a candidate's chances of receiving aid, it was observed that the more offers a candidate received the less likely he was to accept the highest total dollar amount offered. Why this was true it is difficult to say with assurance, but it is entirely possible that the presence of commuters in these data is responsible for this pattern. In other words, a student might well have accepted an offer which, in dollar amount, was less than his highest offer but, relative to the costs of attending the college chosen, had much higher purchasing power. Too, it has been suggested at times that students will often accept a lower offer at their first-choice college, turning down an equal or larger offer at their second-choice college. In passing, it is interesting to note that, of the men receiving offers, 25% were made two or more while only 17% of the women who received any offer received two or more.

The acceptance of offers did not seem to indicate disfavor toward or a particular liking for any particular

form of aid package over any other that had been offered. Nor were there any significant shifts in the dollar value of aid between its offering and its acceptance.

As might be expected, the average dollar amount of aid held by commuting students was somewhat less than that held by students in residence, although the differences was not as great as would be anticipated if it were assumed that it would represent the difference between having to pay or not having to pay room and board expenses. Two conclusions that might be drawn from this are that on the average, commuting students are the more needy as a group in respect to the expenses they must meet, or that it is not as inexpensive to commute as one might assume.

A comparison of the types of aid held by commuting students with those received by residents indicates that almost without exception commuting students were awarded gift aid. Other types, either single or in combination, did not appear a sufficient number of times or in any pattern which would mark their use as significant. This is quite interesting when contrasted with the use made by high cost men's institutions of scholarship-job and other forms of aid, for it would appear that this pattern is limited to resident students. It is true that only about 10% of the students holding aid at these institutions were commuters, but still, if the scholarship-job philosophy had applied to them, it would have been more apparent in the data. Perhaps the conclusion arrived at earlier, that aid in combination was used essentially to increase the dollar value of aid, explains the lack of complex aid packages for commuters where the size of the aid package was not so great.

It is not possible to determine from the data whether a commuter applicant for aid will receive equitable action on his application when in competition with the resident applicant. It does seem, though, that those who do receive aid as commuters, on the average, are awarded amounts which approach or are equal to those received by residents relative to the actual costs for each. In fact, in some colleges the differences are so small as to indicate that the average commuting student with aid may be doing better, his ex-

penses considered, than the average resident student.

Both the likelihood of receiving an offer of financial aid and the size of that offer show some interesting relationships to the family income of the candidate and to the amount that the family said it could provide from its income and assets to assist the candidate with college expenses. Two tendencies were noted at men's colleges. As the size of the family income increased, the average value of the college offer decreased, as might be expected. It was a little surprising, however, to find at these colleges a tendency for the average value of the college offer to go down as the parents' offers increased in value. This was generally characteristic of all income levels. One possible reason for this is that assets were present where the family offer was large, a fact which income figures alone would not reveal. It is also possible that family offer carried equal weight at the colleges with other circumstances, as reflected in income, in determining size of college offer to the candidate. At the women's colleges, on the other hand, the mean value of the offer varied only slightly with size of income and showed hardly any in-



clination to vary with size of family offer. The practice of coeducational colleges in making offers to men was quite similar to that found in the men's colleges while their offers to women were not sufficiently consistent to permit accurate characterization.

The effect of size of family offer on the likelihood of receiving a college offer is not shown conclusively by the findings, although they do suggest some interesting general possibilities. Regardless of the type of college involved and pretty much regardless of the income level of the family, an increase in family offer up to about \$400 seemed to carry with it a noticeable increase in the chances of receiving an offer of financial aid. Once the offer reached \$400, the chance of receiving



Figures 1-4: Proportions of applicants receiving at least one offer, related to number of applications made

Fig. 1. Men—public secondary schools

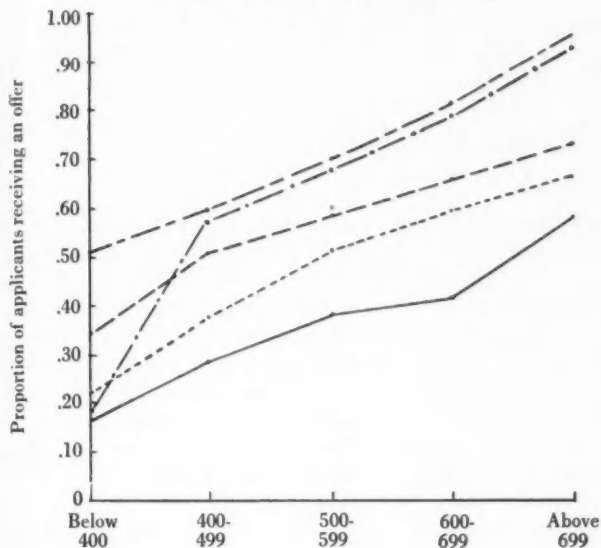


Fig. 2. Women—public secondary schools

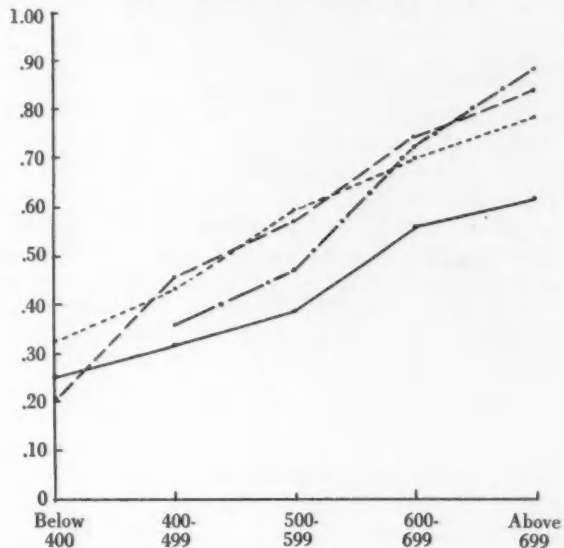


Fig. 3. Men—-independent secondary schools

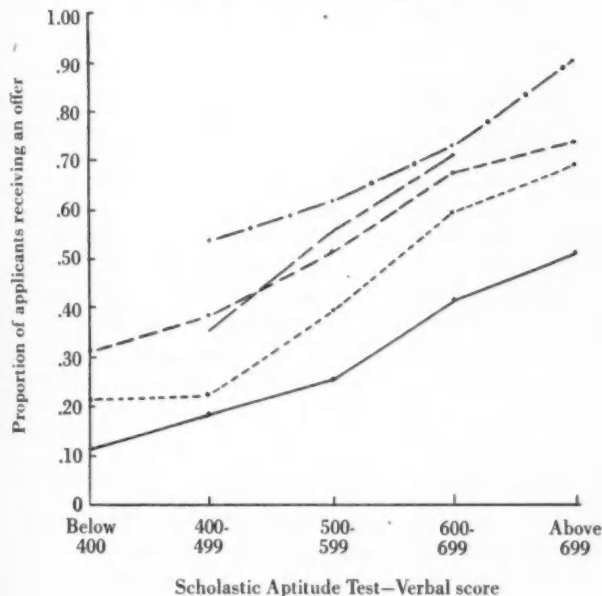
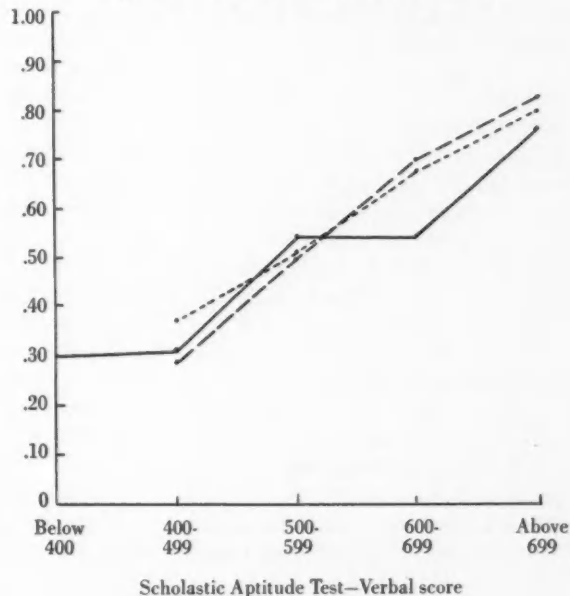


Fig. 4. Women—independent secondary schools



— Application to one college    - - - - - Application to two colleges    . . . . . Application to three colleges  
 - . - . - Application to four colleges    - - - - - Application to five or more colleges

at least one offer remained quite constant until the family offer reached the \$700-\$900 range, at which point the chance declined, though never to the point at which it was at the low family offer level. One inference that might be drawn is that inability to show evidence of some willingness to help the candidate with his expenses, being

looked on by colleges as either hopeless or undesirable, decidedly limits the opportunities open to the student for aid. Lack of any family offer is more of a deterrent to receiving a college offer than evidence of willingness to pay all or a sizable portion of the expenses. The fact that large offers are hard, if not impossible, for most col-

leges to make lies behind a statement made by many scholarship officers: "We didn't offer him anything; his need was just too great."

In bringing a summary report of this kind to a conclusion it is probably more appropriate to acknowledge that much remains to be done in describing and clarifying scholarship practices

than it is to attempt an evaluation of the information which has been presented. To pass judgment on some of these findings without adequate understanding of the factors which produced them would be unwise. To reason why some of the less obvious phenomena occur leads to contradiction, I have already found in discussing the findings with colleagues. Each person reading this report will interpret the findings in the context of his own biases and experiences, for no one finding necessarily has singular meaning.

In the final analysis, financial aid represents the understanding which exists between a unique, fallible institution and a unique, fallible individual. Any attempt to characterize all colleges, all aid programs, and all candidates, or even to characterize these by types or by other refinements, does great injustice to some of them and certainly mild injustice to all. To the extent that it is possible, the relationship between the college and the candidate in financial need is and should remain personal and flexible, an association that cannot be retained in broad research. CSS has been a strong proponent of this philosophy, and its attempt to describe some of the factors which affect the offering and awarding of financial aid on a broad scale should not be interpreted as an effort to invade the privacy of the college-candidate relationship or to encourage conformity by any college to any norm.

The communication of information concerning opportunities to the candidate who is in need of financial assistance and has the abilities required to attend college remains a most pressing problem. In one sense, studies of this kind help focus attention on available opportunities, but they are incomplete in failing to express the interaction between the individual candidate and the individual college. To correct this shortcoming, each college must not only be familiar with the uniqueness of its program, philosophy, resources, and candidates, and the interaction of all these, but should communicate these characteristics to parents, candidates, and schools. It is hoped that this study, if it has no other value, may prove useful to the individual college which is searching for ways to describe it uniqueness to itself, its candidates, and its broader public.

## "She just isn't college material"

"My daughter simply is not college material." This statement is never made as a matter of fact. Emotional overtones suggest the lurking presence of a problem, for the parent, for the school, and presumably for the daughter. What is the problem? Why does it exist? And what is the solution?

Some seven years ago, when I was newly come to the private school of which I am the head, parents were understandably cautious about enrolling their daughters, and preferred to await the outcome for the children of others before risking their own in my care. But there are always the brave. These presented themselves for the interview with the frequent question: "Mrs. Hall, just what are your standards?" Apparently this was not an inquiry into the condition of my moral rectitude but a request for information on the number of graduates who had got "into" college. Statistics proving that a preponderance of the previous year's graduating class had gained admission to four-year liberal arts colleges clearly won us favor. The ability further to demonstrate that a large number of those going to four-year colleges had gone to the most reputable and widely known of the nation's colleges and universities won us enthusiastic approval and the visit was then almost sure to be followed with an application.

Now, seven years later, the situation at the interview is seemingly reversed, but I wonder if it does not bear some relationship. No longer cautious, parents come already "sold" on the school, anxious only for assurance that their daughter can be admitted. Heard most often now is the statement that one or the other parent is, or both are, "afraid" that she "simply" is not college material. When made by the father there is sometimes a hint of wistfulness, as though he rather wished that she didn't need to be a college candidate and could just be the nice, good and charming little woman that he is sure she is already. When made by a mother, however, there is sometimes a note of wounded pride, a fierce assertion implied that this particular mother loves her daughter even if she isn't college material, and anyway, who knows but what she may not yet turn out to be, because after all everyone in the family was slow in developing and the mother could not "do" algebra either.

All of this seems to indicate that schools are to some extent considered "good" or "bad" according to the number of graduates sent on to college, that the measure of a student's worth is influenced by his ability to qualify for college, and that the reputation of the colleges concerned has some bearing on the judgments that are made. It is with such values being applied that students seek admission to the "college preparatory" school. And I suspect that in the public schools it is somewhat the same with respect to the decision as to whether or not to enroll in the "college preparatory course."

The way in which the girls' schools (and perhaps other schools) themselves sometimes use that term "college preparatory" helps to foster the continuation of this value scale. So far as the school is concerned, the measure



Mrs. Livingston Hall has been headmistress of the Concord Academy, Concord, Mass., for seven years. Her article is reprinted from the *Vassar Alumnae Magazine*, October 1956.

of success with a given girl ought not to be admission to college but the girl's eventual use of her particular ability, what she does with what she has for the enrichment of the community as well as for herself. Little credit may attach to the school for getting a natural born intellectual into a highly competitive college whence she may graduate Phi Beta Kappa and Summa Cum Laude some four years later. But considerable credit may attach to the school which can persuade an inexhaustibly energetic 14-year-old with widely diversified and often colorful interests to gather her forces together and do something constructive with them, not only for herself but for others.

### *False standards of success*

The term "college preparatory" ought merely to reflect the fact that good teaching is facilitated by the grouping together of students of similar aptitude, and the likelihood that students selected for their intellectual capacity and interest will seek quite naturally to make good on their ability through further training in a liberal arts college. Yet schools sometimes take pride in using the term as though it denoted a better kind of education, and in so doing imply that they set admission to college as a worthy aim in itself and the standard of success for all their students.

The effects of this are no harder to imagine than they are to see. There are the girls who having reached the age of 14 and having been unable to qualify for a so-called "good college preparatory school," are imbued with a feeling of inferiority. It is not easy at that age to understand that there are other criteria for judging human worth, and that the determination of differing aptitudes is really not a criterion at all. Such feelings of inferiority may well last a lifetime, for by the time the youngster has achieved more perspective, she may have become used to the idea so often expressed by her, "Gee, I guess I'm just dumb."

There are also the college candidates who never become college students, the girls who do not "get in." For these, too, there is the sense of failure and inadequacy felt out of all proportion to its significance. And there are the girls who pretend to an intellectual

curiosity that they do not really feel, who have the aptitude but not the interest, who work to "get in" because as one possessed of rare and honest insight once said, "What would I do if I didn't go to college?" And there are the harassed high school juniors and seniors without much margin of safety, so far as scholastic ability is concerned, for whom "getting in" is the end of being and to whom the idea of disillusionment has not even occurred. Their colorful 14-year-old energies have indeed been concentrated into a single effort, but not, it would seem, in behalf of God and Country, nor even of Yale, but in behalf of "getting into one of the good colleges."

If the wear and tear on the students is great—and it is, of course, hard in turn on the parents—it is no less great on the school and college. In the schools there is the temptation to pretend to college preparation when in fact the caliber of the students enrolled dictates the need for quite a different kind of teaching. And there is the pressure in the true college preparatory school to get the marginal student "in," pressure that comes mainly from ambitious parents who cannot accept the possibility that the daughter cannot or should not go to the college they have dreamed of for her, and pressure from their daughter herself whose white face and taut nerves attest the fact that the very forces which make her work may prejudice the end they seek to gain. In the colleges there is the "drop-out," and the increasing dilution of curricular content continually threatened by the presence of the non-intellectual who neither drops out nor flunks out. And binding all of these effects together is the element they hold in common, the wastage of human resources. Challenge builds character up to a point. It is good for young people to reach beyond their grasp. But surely it is sinfully wasteful to set any person to achieve success in a line of endeavor for which he has no talent at the expense of finding out what he can do well.

So now the problem can be defined. How, in a situation which seems to demand that everyone go to college or suffer a loss of prestige, are we best to educate the girl whose interests or aptitudes or both do not clearly fit her for training which puts emphasis, or



should put emphasis if the true meaning of liberal education is to be retained, on the development of the mind's capacity for reasoning and analysis, for seeing cause and effect relationships, and for dealing with the idea and the abstract? "I don't dig the image," says one. "It's too deep for me," says another. They struggle painfully on through the process of learning to think reflectively, cheerful for the most part, but sometimes tearful, and always dragging at the heels of their more intellectual sisters. They win honors for survival and accumulate a lifelong conviction that they "haven't got the brains." Which is not always quite true; some very bright people simply do not have a bent for thinking in that way. Are we to continue thus? Or can a way be found to teach the nonintellectuals that they too can serve honorably as well as usefully?

### *The college compulsion*

An examination of causative factors may suggest an answer. First of all, there is the exalted position of the liberal arts tradition. An antique civilization held that such an education was that worthy of a free man as different from a slave or menial. Which meant that whatever its uses toward the enjoyment of a full intellectual life with all that that might mean for the possible enrichment of others, the liberal arts could embrace no training that involved work with the hands or manual labor. It is odd that Americans





should hold to the same view today when they have so recently fashioned a civilization from the wilderness, and should honor their forbears for doing so; worry about the softening effects of the luxuries they have created with their hands; suffer thousands of injuries annually while endeavoring to fix things themselves; and hustle their children from school into jobs as soon as they are able to baby-sit or wait table on the ground that it is sinful to be idle. But they do. And it is right that they should continue to exalt the tradition which is the greatest source of our intellectual leadership. Without that leadership we would all be doing and fixing, and the gadget and the atom bomb would in fact reign supreme.

But it might be well for us to take a new look at the old concept, to remember that it was and still is for the few and not for the many, and if this is undemocratic, to make adjustments by some means other than those which we are currently employing. As it is now, believing the liberal arts to be the "best" in education, and having hearts as warm as toast toward everyone in theory and toward children in fact, we are engaged in generously making every youngster into a philosopher king (or queen, for this is, after all, mainly about girls) while at the same time preaching that no one is one bit better than anybody else. Surely, as Alice said of the Wonderland croquet game, "you've no idea how confusing it is..."

Secondly, we have the ghosts of Susan B. Anthony, Carrie Chapman Catt, and M. Cary Thomas, seemingly

still exerting an influence. Name these doughty exponents of women's rights to the teen-age girls of today and they will seldom know whom you are talking about. Nor, in many instances, will their mothers. Yet these feminine warriors of two or more generations past continue to make themselves felt; while their descendants take entirely for granted the freedom that was won for them, yet that freedom is burdened by a sense of obligation to make life count for something besides homemaking. "I want to get a *real* job," is said over and over again.

Ask any group of college-bound high school students their reasons for going to college, and after you have penetrated beyond the first defense to the effect that a college education makes for being "well rounded," you will get in one form or another a statement that college is a necessary prerequisite for well paid employment of a worthwhile kind. Coming from one who may expect to be the main financial support for a number of dependents the statement is entirely appropriate. But coming from girls who hope almost without exception to be married and have children in five to 10 years time the statement suggests that they have been conditioned to believe that training in the liberal arts is some sort of professional training, that it is largely wasted unless followed by professional work, and that fulfillment for the individual is questionable in any other line of endeavor. Thus many a mother, projecting a college future for her daughter, gives the impression that in so doing she is determined to fulfill in her child a lack which she herself has suffered.

And, finally, there is the question that parents face of what to do with a daughter who has finished her formal education but has not yet married. At the turn of the century the process was completed for most girls at the termination of high school. The problem was solved for the social elite by the institution of the debut; other girls helped around home or went into teaching, the only profession universally accepted at that time as entirely respectable. In either case the compulsion toward early marriage must have been fully as great as those who are alarmed about the present generation declare it to be today.

Since then women have become emancipated, which means not only that the gates are opened up for the young women but that she *must* go through them and do something "real" because it is not respectable simply to stay at home and "do nothing." If neither parents nor daughter are prejudiced about the type of employment, progress into the "real" world can be effected immediately after graduation from high school. But most parents are prejudiced, as are their daughters, although not generally for the same reasons, and full employment has gone hand in hand with industrial specialization, so that the jobs with better pay and more prestige do require a college degree. Thus we have the daughters, abetted principally by their mothers, wanting jobs that require more education, and we have the parents, represented principally by the fathers, wanting their daughters to be safe. The four-year college is regarded as the best place for accomplishing both these purposes.

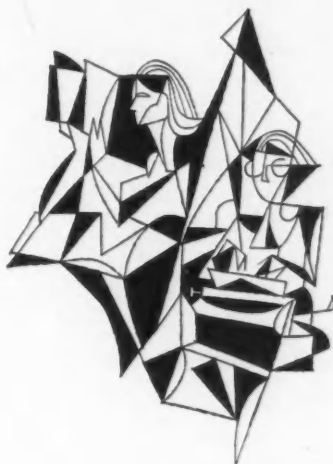
These seem to me to be the principal origins of our urgency to get all our girls "into" the "good colleges" for the longest possible time: the prestige of the liberal arts, the drive to be something more than a housewife, and the desire for safe passage between home and matrimony. It is a complex of social attitude, subconscious desire, and practical necessity. As such it is not only human but also understandable. And as such it cannot be altered by mere preaching.



We must be persuaded that there is a better way of supplying our girls with the best, which is all that we have ever wanted for them anyway, and it matters only that we know that it really is the best. Already there are those eager to be persuaded: the disappointed and the disillusioned, and their parents, not to mention the schools and colleges for whom the task of admissions has truly become nightmarish in character. It is a matter, therefore, mainly of enlightening the persuasive forces of circumstance by the somewhat Freudian process of understanding our motives. With this accomplished we can take some action to hasten the development of a truly sound method of educating the girl who "simply is not college material."

We can begin by recognizing the existence of aptitudes and interests as distinct from intelligence. Nobody wants to be classified as "dumb." So long as the analytical type of mind suitable for training in the liberal arts is deemed to be the product of superior intelligence alone, so long is the vast majority going to seek that kind of training to the sorrow of countless numbers and the confusion of intellectual development. Throughout the educational process parents could pay more constructive attention to the reasons behind their children's school successes and failures, and schools could talk less about "late bloomers" and do more about early determination of aptitude and interest.

Both parents and schools are avidly interested in reasons now, and have been ever since child psychology was brought down in part to the layman's level. But much of this interest seems to derive from the same sort of curiosity that prompts the plucking of petals from a daisy, loves-me-loves-me-not being translated into can-she-do-it-can-she-not, rather than an earnest search for the particular ability of a given individual. Changes in curriculum are not the answer, although modifications are doubtless in order in some instances, particularly at the high school level. In no sense is an early classification of children as being of one kind or another to be urged: the theory of the core curriculum is a sound one through the adolescent years. But better teaching could do much for the realization of the in-



dividual's potential. And better guidance and counseling should be an integral part of teaching, not the separate task of a specialist—admittedly a difficult assignment in face of the numbers we educate, but not impossible. Parents could take the cue from their child's performance in school to open their minds to a variety of possibilities in future. The question constantly to be asked by both school and home is, "What can this youngster do?"

#### *Other educational alternatives*

With the rating of bright-or-stupid relegated to its proper denomination as an interesting and informative but in itself unconstructive fact, much could be done to build up the prestige of post-high school training in courses other than the liberal arts. With both girls and their parents eager for such training a far greater and better range of educational opportunities could be developed at this level.

The quality and character of the vocational schools could be improved. And for the far greater number of girls who still do not know exactly what they want to do upon graduation from high school a very great deal could be done in the area of the two-year or junior college. Here there is the greatest room for growth and a crying need for bold courageous leadership coupled with creative imagination. We need many more and better junior colleges. And good junior colleges will flourish and increase if they can be afforded a climate which can permit them to be openly and honorably exactly what they are. At present they are regarded

too often as educational "deep freezes" for the girls who could not "make" the more competitive and fashionable four-year colleges. And in consequence they have been tempted to pretend to a liberal arts tradition when in fact they were catering to girls of quite a different bent. They should be able honestly to serve two urgent needs: one for an institution that faces squarely up to the fact that the likelihood of being able to complete four years of training beyond high school is often questionable for a girl in an age that facilitates early marriage by permitting the wife to work while her husband completes his own education; and the other for an institution that can introduce the still groping and uncertain high school senior to the vocational choices of a highly complex society while at the same time finishing off her general education.

Finally, we can perform perhaps our greatest service by recognizing that the feminists have won their battle. It is time now that women everywhere realized that they can relax and enjoy being themselves. They have the vote and they have proved that mind for mind they are just as bright or stupid as the men. It is time that they paid some attention to their special opportunities and made the most of them. If they but knew it, girls have opportunities that never can be and never will be open to boys. Parents wish to give their daughters "the best." Consider the parents with the son. They wish to give him the best too, but the best will always in his case have to be tempered with "must," the obligation to be a support to his family. Let the son exhibit a bent or talent which needs developing in order to be the best for him and, quite possibly, through him the means of enriching the lives of others, and there will always be a worried wondering as to whether free development will prejudice his chances of a secure financial future. Not so the girls. They are far freer to be themselves, and should be so. In fact, it can be said that they have a positive obligation to be so in view of the fact that the cultural enrichment of husbands and sons must necessarily depend to a large extent upon what the women make of themselves without regard to whether they are, or simply are not, college material.

## Bricklaying and brickbats

### A comparison of problems which led to the formation of the College Board with problems facing the Board today

May I recall to you another meeting of this association<sup>1</sup> when college admissions was on the agenda. For 30 years, from the inauguration of President Eliot of Harvard in 1869 to the meeting on December 2, 1899, in Trenton, New Jersey, of the Association of Colleges and Secondary Schools of the Middle States and Maryland, the admissions requirements of colleges had been the subject of weary complaint and apparently futile discussion. Dr. Claude M. Fuess in *The College Board: Its First Fifty Years*,<sup>2</sup> tells how the matter was brought to a head:

"Butler had decided in advance that the hour had arrived for the presentation of a formal resolution calling in specific terms for the establishment of a College Admissions Board. President Eliot, learning of Butler's intention and wishing to support him, left Cambridge and came all the way to Trenton by the night train, although he was not, of course, a member of the Middle States Association. Thus, the two leaders were there together—Eliot the older by some 28 years, but equally eager to win the victory. Eliot was reserved and introverted; Butler was an expansive extrovert. Eliot was calm and deliberate; Butler was impulsive. Together they symbolized the best in American higher education.

"Three topics had been assigned for consideration at this meeting; the second was 'Uniform College Admissions Requirements, with a Joint Board of

Examiners.' At the appropriate moment Butler rose, offered his resolutions, and spoke briefly in their favor... Butler was followed, according to arrangement, by Principal Christopher Gregory, of Long Branch, New Jersey, representing the public schools, who in measured language substantiated all that his predecessor had said. Then the fireworks began. President Patton, of Princeton, speaking for the Old Guard, rose and plausibly defended the current practice. Next President Ethelbert D. Warfield, of Lafayette College, a young man, only slightly older than Butler, secured the floor and rather solemnly protested that such a Board would invade the rights of the colleges and restrict their privilege of selecting their own students.

"Lafayette College does not intend [he declared pompously] to be told by any Board whom to admit and whom not to admit. If we wish to admit the son of a benefactor, or of a Trustee, or of a member of the Faculty, and such action will benefit the institution, we are not going to be prevented from taking it."

"As he listened, Eliot realized that unforeseen circumstances had delivered his opponent into his hands. It was precisely the situation which he relished most, and he improved it. Rising and standing as usual so stiff that he seemed to be bending slightly backwards, with his heels close together and his hands gripped tightly in front of him, he began slowly, without any display of emotion, to speak in general terms of the advantages of Butler's plan. Then with a faint smile on his austere countenance, he turned to look at Warfield and said:

"The President of Lafayette College

has misunderstood Mr. Butler's proposal. The College Entrance Examination Board, if constituted, is not to admit students to any college, but so to define the subjects of admission that they will be uniform, to conduct examinations in these subjects at uniform times throughout the world, and to issue to those who take the examinations certificates of performance—good, bad, or indifferent. And, President Warfield, it will be perfectly practicable under this plan for Lafayette College to say, if it chooses, that it will admit only such students as cannot pass these examinations. No one proposes to deprive Lafayette College of that privilege."

"As these telling words fell from Eliot's lips, the assemblage broke into unrestrained laughter and then into loud applause... When the vote was taken the association declared itself unanimously for the establishment of the new Board."

Fifty-seven years later we are now somewhere in such a period of weary complaint and apparently futile discussion as preceded the 1899 meeting. The schools are criticized for the inadequacy of their preparation, particularly in mathematics and the natural sciences, but also in English, foreign languages, and the social sciences.



William C. Fels, associate provost of Columbia University, served as Associate Director of the College Board from 1952 to 1956 and as Secretary from 1948 to 1955.

<sup>1</sup>This paper was delivered by Mr. Fels at the meeting of the Middle States Association of Colleges and Schools on November 23, 1956. It is reproduced through the courtesy of the Association.

<sup>2</sup>(New York: Columbia University Press, 1950.)





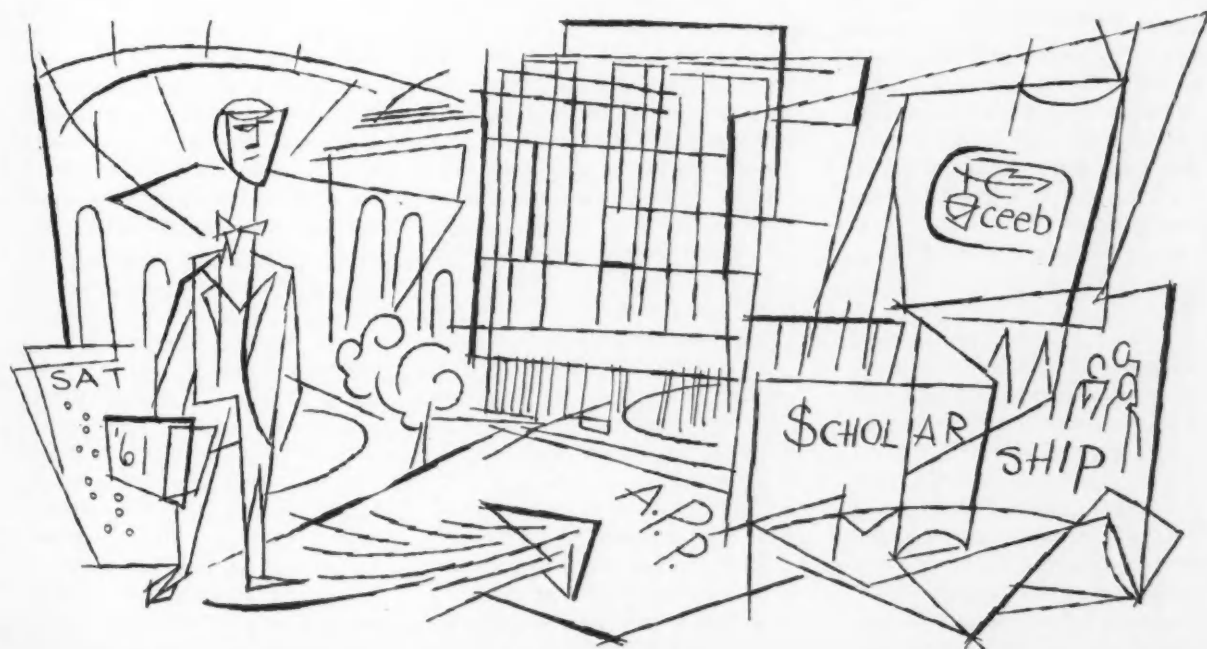
Their counseling and guidance programs are said to be too little and too late. The colleges are accused of providing inadequate information about their admissions requirements and standards, of inflexible placement procedures leading to duplication in college of studies begun in school, and of ill-timed, clerically complex and expensive entrance procedures. Schools and colleges together are held respon-

sible for an overly long and porous education which is not supplying, and which shows no prospect of supplying, the nation with adequate numbers of trained persons.

But this meeting is not to see a repetition of the 1899 meeting. I have not come to Atlantic City from Columbia with a pocket full of resolutions, nor has Mr. Pusey, to my knowledge, taken the night train from Cambridge. No

single panacea will solve our present problems. Even if the President of Lafayette should obligingly deliver himself into my hands, I would have no single blow with which to crush him, though I might be able to do him in with buckshot.

The long period of discussion that precedes a major breakthrough is only apparently futile. Actually it is necessary to the breakthrough. The resolu-



tion of the college entrance dilemma in 1889 followed inevitably on the results of earlier conferences. At Trinity College, in 1879, broad agreement was reached regarding desirable requirements in English. Similar meetings in 1861 and 1882 accomplished a partial clarification in the classics and mathematics. In 1888 and 1895 the task of defining a four-year English course was completed. In 1897 Harvard introduced a physical science entrance requirement which had far-reaching effects. Finally, the famous Committee of Ten, appointed in 1892 by the National Education Association and charged with the investigation of the whole subject of the relations between schools and colleges, outlined what has been called "the first comprehensive program of secondary education" and did the spadework necessary before the College Entrance Examination Board could be formed.

Such spadework, or more appropriately bricklaying, is going on today. I will now turn to describing it and to suggesting what kind of a structure may result.

#### *Scholarship trends*

Scholarships are a special case of admissions, but recent developments in the scholarship field will serve well to illustrate the bricklaying process. Here three significant trends are discernible: First there is the shift, begun before World War II and since accelerated, from passive local and regional admissions to active national talent searching. The traveling admissions counselor, the participation of local alumni and alumnae clubs in student recruiting, and the National Merit and General Motors "scholoramas," as B. Alden Thresher, director of admissions at Massachusetts Institute of Technology, has called them, are all expressions of this trend. A second tendency has been to replace relatively low stated tuitions applicable to most of the student body with high stated tuitions approaching the true cost of education but applicable to only a part of the student body. Effective tuition charges for the balance of the student body are adjusted by feeding tuition income back into scholarships awarded to students in accordance with their ability to pay. High tuitions and rising

percentages of scholarship students mark this tendency. And third, there is the effort of the American people to extend to higher education the principle of equal opportunity without financial restriction while maintaining the traditional dual system of public and private colleges and universities. This effort is reflected in the initiation and broadening of state scholarship programs and in the discussion of Federal scholarships.

The fulfillment of these trends requires a structure only one of whose bricks existed 10 years ago, but which have since been put into place, one by one. There was need for a nonprofit agency under the policy control of colleges and schools to advise and assist corporate and government sponsors in the establishment of scholarship programs. This need was met by the establishment at Educational Testing Service of the Sponsored Scholarship Service. The Service has rendered assistance to National Merit, General Motors, the California State Scholarship Program, and to dozens of less spectacular and smaller but no less worthy enterprises. There was also need for an inexpensive, widely administered screening test. This was supplied by the introduction this year of the College Board's Scholarship Qualifying Test. The more secure and precise tests necessary for final selection of scholarship winners already existed in the Board's regular program. On the financial side there was a pressing need for an equitable method of determining students' ability to pay, and for a system of interchange of information among colleges before offers and after awards to insure an orderly and economical administration of scholarships and to avoid an increasingly chaotic and expensive dollar competition. These needs were filled by the establishment within the College Board of the College Scholarship Service, to which more than 150 member and non-member colleges now belong. These colleges probably award about half of all the collegiate scholarship funds currently available.

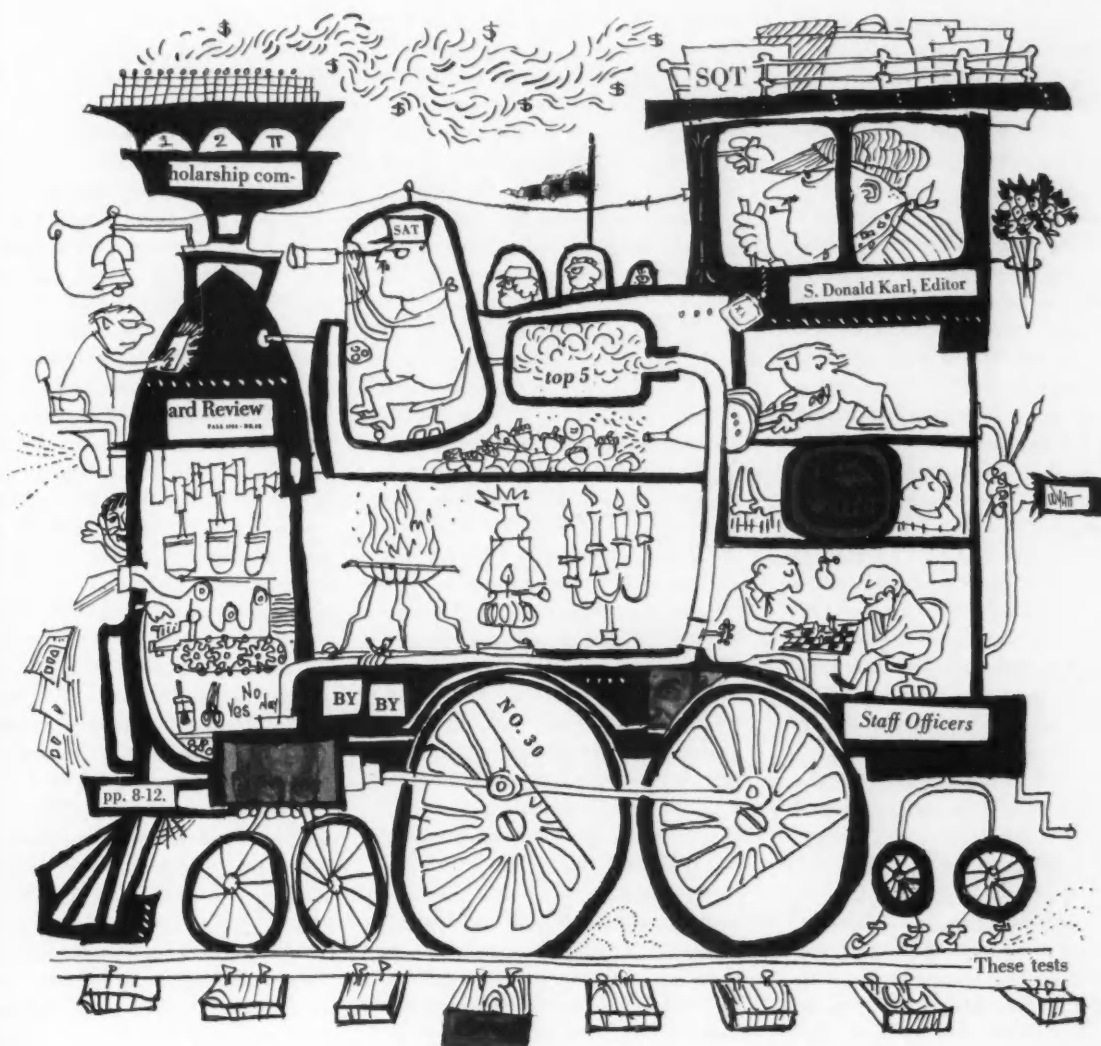
Thus we now have, on a national scale, the machinery for selecting by ability and setting stipends, or to put it the other way, tuition, according to need. This machinery is available to institutions, whether public or private,

and to sponsors, whether corporate or governmental.

The use to which we put this structure or machinery in the coming years is, of course, a matter of conjecture. But it seems highly probable that stated tuitions will continue to rise until they reach, and perhaps exceed, the cost of education. Simultaneously, the percentage of students on scholarships adjusted to their needs will increase from the present 20-40 per cent to the 80-100 per cent we already find in England. To put this another way, the trend is toward a 100 per cent scholarship admissions policy in which every applicant not able to pay the high stated tuition will be required to apply for a scholarship and file a financial statement. In return he will receive assurance that his expenses will be adjusted to his need. Since this will mean higher tuition from high-income-bracket parents, it should go a long way toward solving the problems of financing higher education. And since the tuition for an individual student at a private institution may be no higher than at a public institution it should help to maintain a balanced access to the national pool of talents for both these types of institutions.

In the scholarship area the bricklaying is completed. A new structure has arisen and it only remains to move all the way in. In the area of preparation and requirements, the old structure created before the 1899 meeting of the Middle States Association and held together by many a heroic patch, is crumbling. The Carnegie Unit is passing. The College Board has not published Definitions of Requirements since the war. The Fund for the Advancement of Education's three experiments—the Early Admissions Program, the School and College Study of General Education, and the School and College Study of Admission with Advanced Standing—have introduced a new flexibility into admissions. The increasing reliance on aptitude testing has opened a path to college which skirts the thorny fields of subject matter preparation. College admissions requirements have become increasingly vague. Secondary school programs have become increasingly various.

There are signs that a new structure is emerging, a stiffer structure than we have seen in recent years. There has



## All aboard

Whatever the College Board may have been to Nicholas Murray Butler and Charles William Eliot, and whatever it may be to William C. Fels in the accompanying article, it is certainly something else to W. Stanley Wyatt. For five years Mr. Wyatt has been plied with *Review* articles. He has been asked, or more truthfully speaking, been begged, cajoled, and sometimes browbeaten into first reading, then illustrating almost everything anybody could say about almost anything related to college admissions. He has been urged from issue to issue, or even page to page, to be witty (but not flippant), serious (but not somber), and all else failing, to be abstract (and

meaningful). He finally decided to be himself in the above drawing, to have a little fun with the Board and its staff, and the *Review* as he knows it—kindly omitting artistic reprisals more bitter than those ordinarily associated with shears, paste pot, beds of nails, tattered artistic sleeves, and whatever that little fellow thumbing his nose may mean. In any case, the locomotive is in motion, going two ways at once if the \$ smoke and flag are valid indicators, all parts intercorrelating and articulating to Mr. Wyatt's satisfaction and, it might as well be added, to the perpetual astonishment of a crew which always wonders what may lie around the bend.



been a marked change in the focus of attention from life adjustment for the average student to intellectual fulfillment for the able student. This change in the focus of attention has been made possible by the near completion of the task of bringing all youth of high school age into the high school and providing a suitable program for them. The course of study for the able student is being reexamined. At the request of its examiners in mathematics, who were finding it impossible to continue to prepare tests predictive of college success based on the traditional school curriculum, the College Board has established a Commission on Mathematics. It is expected to emerge after consulting mathematics teachers with a new course of study in its field. Other requests, arising from the colleges, for commissions in the social studies and physics have not yet been acted upon. There are movements to strengthen modern language instruction, particularly in the areas of speaking and listening comprehension. Tests of developed ability, more probative of preparation than the Scholastic Aptitude Test and covering the broad areas of the humanities, social sciences, and sciences are nearly ready for introduction.<sup>3</sup>

#### *Advanced Placement Program*

Most important of all, the Advanced Placement Program is blowing a fresh breeze through the schools and into the colleges. Schools are undertaking college-level courses and colleges are granting advanced placement and credit. The program is already leading to the reexamination of the whole sequence of studies through school and college by teachers in both types of institutions. They are gaining a new respect for each other and a new understanding of each other's problems. The history of the American secondary school, until the turn of the century, was one of taking over subject after subject from the college. If we were not bedeviled by the most serious problems of teacher supply and training, I would confidently predict that this trend would be resumed, and that the Advanced Placement Program would result in the secondary school's taking

on what is now the college freshman year. Certainly the best-staffed schools are beginning to do so. What I think we can look forward to with reasonable assurance is a redefinition of the secondary school course of study for the able student attended by a clarification and stiffening of college entrance requirements. I do not believe these requirements will be narrow or restrictive, but they will call for evidence of progression in strength in English, another language, history, science, and mathematics.

#### *Admissions problems*

In scholarship administration we have built a structure. In subject matter preparation we can see one emerging. But in the administration of admissions we have only a few battered brickbats hurtling through a rapidly thickening crowd of counselors, students, parents, and admissions officers. The colleges' statements of terms of admission do not permit the counselors to predict admission with reasonable accuracy. The colleges are bombarded with multiple applications. They defend themselves with high application fees which multiply the cost of applying to college. There is a multiplicity of application blanks which vary only slightly from each other, but enough to make many principals rebel and submit their own forms, which the colleges claim they can't read or interpret. The candidates are not required to express a choice of college, so the admissions officers grope in the dark and go through agonies of computation to determine attrition, followed by harrowing hours while they wait to see whether they will have too few freshmen to fill their classes or too many to accommodate in their dormitories. All this with the promised "tidal wave of students" advancing across the troubled sea.

Strangely enough, this profound confusion needs only three instrumentalities for its resolution: a "Characteristics Handbook" giving clear individual college statements of admissions requirements buttressed by adequate descriptions of the characteristics of the freshman class; a central transcript service using a uniform blank for the transmission of school information; and a clearinghouse for choices which would match the colleges' choices of

students against the students' choices of colleges until all colleges have classes and all students have colleges to attend.

All of these instrumentalities have been proposed and discussed. The "Characteristics Handbook" was suggested by Mary E. Chase, executive vice president and director of admission at Wellesley College.<sup>4</sup> It is merely an extension of the "Reports on the Freshman Class" sent each year by Wellesley and several other colleges to school counselors. The central transcript service was described by George H. Hanford of the College Board staff at the Board's October 1956 meeting.<sup>5</sup> It is based on the theory that people will not stop whittling their own square pegs until all pegs must go through one round hole. (Here the pegs refer to the forms, not the students.) This was the same theory that made it possible to agree on a uniform financial statement form in support of scholarship applications. The clearinghouse was first proposed, I believe, by John W. Hollowell, headmaster of Western Reserve Academy, also at a College Board meeting.<sup>6</sup> John M. Stalnaker, now president of National Merit Scholarship Corporation, devised such a clearinghouse for the Hospital Internship Program of the Association of American Medical Colleges. It has been in successful operation for several years.<sup>7</sup>

All these plans are in the stage of weary complaint and apparently, but not really, futile discussion. The clearinghouse plan has not been worked out in detail. We need our latter-day Butlers to complete them, our Eliots to support them, and even our Warfields to precipitate them. Today, the solutions still are not fully understood. To some they appear to be worse than the problems they are designed to solve. But there will come another 1899, and we will sail in a well found ship over or through that now famous tidal wave.

<sup>4</sup>Mary E. Chase, "The admissions counselor—guide or gambler?" *College Board Review*, No. 27, pages 25-28.

<sup>5</sup>George H. Hanford, "Transcript service: proposal and response," *ibid.*, No. 30, pages 12-16.

<sup>6</sup>John W. Hollowell, "The admissions process—barrier or gate?" *ibid.*, No. 13, pages 182-186.

<sup>7</sup>John M. Stalnaker, "A candidate-college matching program," *ibid.*, No. 24, pages 13-15.

<sup>3</sup>See pages 5-10.

## Educational level and potential income

In our complex industrial society, educational attainment is one of the most important factors in determining the occupational and income levels to which a person can aspire. This fact assumes special significance in view of the rapid improvement in the educational level of American youth in the last two decades. Although half of the young people today complete a high school education, less than half of the high school graduates go on to college. These proportions might become larger if reliable information were disseminated widely about the potential rewards of completing successively higher levels of education. It is true, of course, that these proportions cannot grow beyond certain limits, inasmuch as some persons who have the capacity to acquire more than a modest degree of education do not have the motivation or the means to do so, and others lack the mental ability to pursue their education as far as they wish and can afford.

It seems reasonable to believe, however, that a majority of youths in this country who are willing and able to continue their schooling can justifiably expect to receive considerably higher incomes in the long run by completing their education through college instead of entering the labor market after finishing high school. This belief rests on the assumption that the American economy can make profitable use in the future of a much larger number of well-educated young people than it has in the past. Moreover, it refers only to material gains, whereas the prospects of achieving more subtle satisfactions from mastering a higher education are more compelling to many people than the prospects of greater financial success.

<sup>1</sup>This article is confined to an analysis of data for men. Income figures cited refer to total income, including both earned and unearned income.

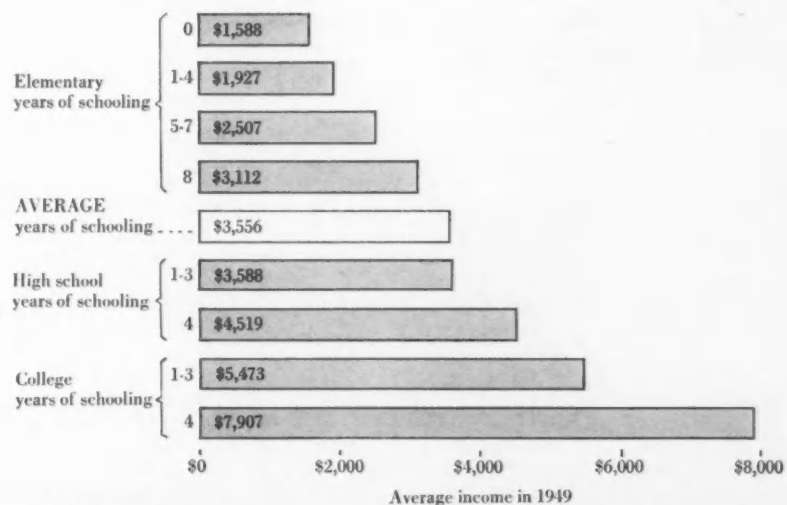
The first evidence in support of the foregoing thesis is presented in Figure 1. This chart is limited to men between the ages of 45 and 54 years because men in this age group are usually experiencing their peak earnings.<sup>1</sup> It is apparent from the chart that there is a progressive increase in the average amount of annual income associated with each increase in education. The largest difference between any two successive groups is about \$2,400; this is the amount by which the annual income of college graduates exceeds that of men who have attended college but have not graduated. Although the levels of the income figures may have already changed somewhat since the base year (1949) and will undoubtedly change in the future, the relationships between the figures will probably continue to show a similar pattern.

The groupings of educational grades shown in Figure 1 are meaningful, but they contain different numbers of school years and hence do not make

apparent the income differences associated with each additional year of schooling. Figure 2 tends to overcome this weakness. The increase in income for each successive education group has been divided by the average increase in the number of years of schooling from one grouping to the next higher one. The results show the increase in annual income associated with an increase of one year of schooling.

Figure 2 shows that each year invested in schooling can be associated with a monetary return. For example, men who had completed high school (but had not attended college) received, on the average, an annual income of \$466 for each year of schooling above the level of those who had started but had not finished high school. This return tends to grow progressively as the higher educational levels through college graduation are reached. Furthermore, the statistics show that graduation at any level gen-

Figure 1: Average (mean) income for men 45-54 years old, by amount of education, 1949



Derived from 1950 Census of Population, Vol. IV, Special Reports, PE, No. 5B, Education, Table 12.

erally yields a bonus amounting to about twice the increment realized by the average man who starts a given type of school (elementary school, high school, or college) but does not finish. (Census data are not available to demonstrate the average monetary value of each year of postgraduate college training.)

The patterns pointed out in the foregoing discussion for all men 45 to 54 years old apply also to white men of the same age group, except that the values for the latter are somewhat higher. Among nonwhite men of similar ages, however, incomes are consistently lower and considerably less responsive to changes in educational attainment; the annual increase in income associated with an increase of one year in schooling is only about \$100 at both the elementary and high school levels. Incomes of nonwhite college graduates are about \$500 per year higher than those for nonwhite men with one to three years of college; this differential, however, is only about half as large as the corresponding one for white men.

Behind the dissimilar relationships between education and income among white and nonwhite men lie differences in vocational opportunities, among other things. To illustrate, the proportion of white men between 45 and 54 employed as service workers and laborers (two occupation groups with low average incomes) decreases significantly for each successively higher education group. Among nonwhite men



Paul C. Glick, chief of the social statistics branch, population division of the United States Bureau of the Census, has been with the Bureau from 1939 until the present (except for military service).

in the same age group, on the other hand, the proportion employed as service workers or laborers decreases very little for successively higher education groups. Even a college education has not been a sufficient qualification to elevate a majority of the nonwhite men above the occupational level of service workers or laborers. Fairly rigid limitations to the utilization of the productive capacity of nonwhite men were evident in the 1950 Census statistics.

If education is regarded as a long-term investment, a consideration of lifetime returns, as well as annual returns, on the investment should be enlightening. At best only rough approximations can be made in this case and these involve numerous calculations with the aid of life tables. In preparing the estimates which are shown in Figure 3, it was assumed that the survival rates for men 22 years old in each education class in 1950 would remain the same as those for white males in 1949,

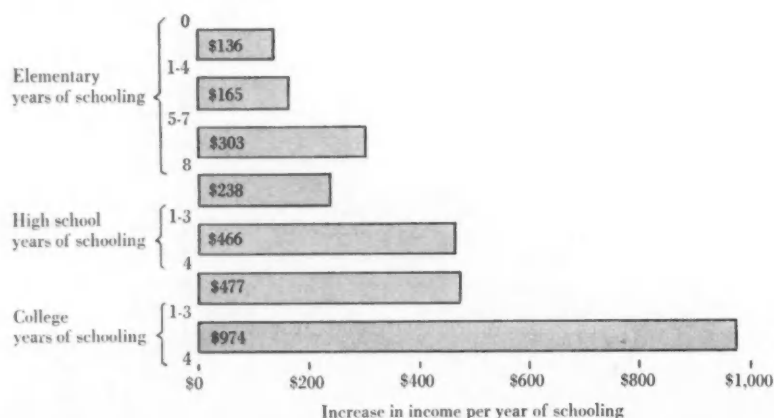
until they reached the age of 74 years or until death, if death occurred before the age of 74 years. It was also assumed that their incomes in future years would be the same as the averages in 1949 for successively older groups with similar amounts of education.<sup>2</sup>

The average man living under the conditions set forth would receive income amounting to a little over \$130,000 during his economically most active years from 22 to 74. The figures range from close to half this amount for men with no education to about twice this amount for college graduates. Furthermore, the figures indicate that a man with a college degree may receive approximately \$100,000 more income during the economically most active years of his life than a man whose education stopped with high school graduation.

The fact deserves repetition that the "lifetime" incomes presented are only estimates and are subject to the conditions assumed in preparing them. The income figures used reflect the extent of illness, disability, unemployment, wage and salary levels, inflation, etc., which prevailed in 1949. Changes in these conditions would naturally change the estimates. But since the average income figures used were all based on the experience for 1949, they have the advantage of representing constant dollar values for all periods of life. Again, it must be acknowledged that many men receive help from their families who thereby make it possible for them not only to gain a college education but also to become established in positions with more than average remuneration. Similarly, some men receive substantial amounts of income from inherited money and other unearned sources which are not related to their educational attainment. On the other hand, about one-third of the college students who are away from home come from families with less than average incomes and few of these students can therefore expect much financial assistance from their parents.

Although about nine-tenths of the young people attend public schools

Figure 2: Increase in income per year of schooling, for men 45-54 years old, 1949

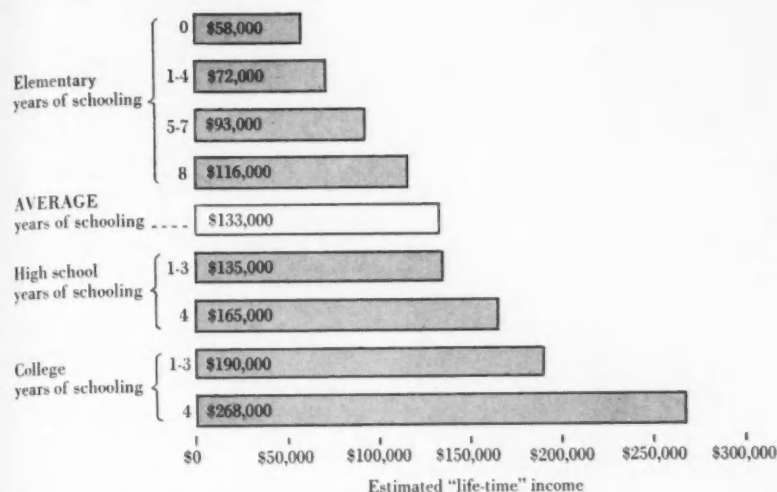


Derived from 1950 Census of Population, Vol. IV, Special Reports, PE, No. 5B, Education, Table 12.

<sup>2</sup>The findings in Figure 3 first appeared in a paper by Paul C. Glick, "Educational Attainment and Occupational Advancement," *Transactions of the Second World Congress of Sociology*, Vol. II, London, 1954, pp. 183-193.



Figure 3: Estimated "life-time" income for men, by amount of education



Derived from 1950 Census of Population, Vol. IV, Special Reports, PE, No. 5B, Education, Table 12.

free of tuition at the elementary and high school levels, very few can attend college without incurring substantial expenses. Therefore, in assessing the monetary value of a college education, it is pertinent to take into account what a college education costs. In estimating this amount, two separate elements may be identified: (a) the direct costs of tuition, books, laboratory fees, and normal living expenses, and (b) the indirect cost, through loss of potential earnings during the period when the youth is engaged in his studies.

#### 7,000-dollar outlay

According to a recent study made by the United States Office of Education, a four-year college education requires, on the average, a direct (mean) outlay of about \$7,000.<sup>3</sup> But since the average college graduate completes, in addition, about one-half year of postgraduate work, the total direct costs actually are close to \$8,000. On the other hand, since the youth would incur normal living expenses whether he attended school or worked, the cost of subsistence may be deducted from the figures

cited. An approximate figure for the subsistence item is \$600 per year; this is the amount permitted as a deduction from one's income for the support of a dependent person, according to tax regulations. Over a period of four and one-half years, the subsistence item on this basis would amount to \$2,700. Subtracting this figure from \$8,000 gives \$5,300 as a more realistic estimate of the direct cost of a college education. (Of course, it is often the parents rather than the students who make most of this outlay.)

The indirect cost, namely, the partial loss of earnings for four and one-half years, may be estimated from census data. The average young man between 18 and 22 years of age who has graduated from high school but not attended college has an annual income of about \$1,200, whereas the average college student earns only \$400 per year. Thus, the college graduate probably loses about \$800 income per year or a total of \$3,600 during his college career.

Putting together the foregoing data yields an estimate of about \$9,000 as the cost of a college education.

As already indicated, men with a college education should accumulate annual incomes over a lifetime (from ages 22 to 74) amounting to about \$100,000 more than those of high school graduates. If the \$9,000 had been placed in a safe investment like

U. S. government bonds instead of a college education, the accumulated annual returns by the time he reached the age of 74 years would be only about \$15,000 and the capital would still be only \$9,000. Thus, the investment in bonds would have produced only about \$24,000 in a lifetime, or barely one-fourth the \$100,000 advantage realized from college graduation. Even if it were assumed that the income from the bonds were reinvested annually (an assumption not made for the income of the college graduate), the investment would still have produced less than \$45,000.

The evidence presented points to the conclusion that the completion of additional increments of education—and especially the completion of college—is associated, on the average, with increased earning power, but that this relationship is much less pronounced for nonwhite than for white men. Graduation provides a special bonus, whether it is from elementary school, high school, or college. Perhaps persistence in school until graduation reflects a complex of capabilities and motivational factors which are conducive to relatively successful performance in an occupation.

#### Variation of incomes

Like all other social phenomena, however, the incomes of college graduates have a range of variation. For example, the average income of college graduates during their first few years out of school is below that for men of the same age who quit school after finishing high school and acquired skills through experience. Even at the period of peak earnings, one-fourth of the college graduates make less than



Herman P. Miller, project director for revision of historical statistics at the United States Bureau of the Census, was in charge of income statistics at the Bureau from 1946 to 1956.

<sup>3</sup> Ernest V. Hollis and Associates, "Costs of Attending College—A Study of Student Expenditures and Sources of Income," U. S. Office of Education, Bulletin 1956 No. 5, Department of Health, Education, and Welfare, Spring 1956. An important feature of this study is the light it throws on the rather wide range of costs of a college education.

the average high school graduate of similar age who did not go on to college. Again, one out of every five high school graduates with no college training has a higher income during his peak years than the average college graduate of the same age.

Viewed in the light of all the facts, it seems safe to conclude that an investment in education generally increases the probability of financial success but does not guarantee its attainment.

Although the foregoing analysis offers answers to some questions, it leaves many others unanswered. For example, some factors, such as the person's intelligence quotient, his class rank at high school graduation, and the financial status of his parents, are no doubt related not only to college attendance but also to earnings in later life; to what extent are such factors independently associated with earning capacity?<sup>4</sup> Can it be established that differences in quality of school training at each educational level help to account for variations in subsequent earnings? Would the results of a longitudinal study based on earnings histories of persons with different educational backgrounds lead to essentially the same fundamental conclusions as those in the present study which are based on a cross-sectional analysis? These and many other worthwhile investigations that could be undertaken would probably require the collection of new data. Other investigations could be made, however, from the same source as the present study. These investigations could include analyses of the relationship between educational attainment and income level by age, sex, and color within broad regions of the United States.

<sup>4</sup> Earlier studies based on students in New York and Pennsylvania throw some light on this question. See Appendix by Elbridge Sibley, "The Relation Between College Attendance and Economic Status," in F. W. Reeves, A. D. Henderson, and P. A. Cowen, *Matching Needs and Facilities in Higher Education* (Albany: Williams Press, Inc., 1948), and Elbridge Sibley, "Some Demographic Clues to Stratification," *American Sociological Review*, Vol. 7, June, 1942, pp. 322-330.

*This paper was read at the annual meeting of the American Sociological Society, 1955, and is reprinted from the American Sociological Review, June 1956.*

## Their college performance

*continued from page 13*

Alice chose science as a major in college but shifted to history early in her junior year and received the bachelor of arts degree. She was active in extracurricular affairs, having been a member of several choral groups, president of the apprentice water ballet group, and, as a senior, president of her residence hall. In her senior year she ranked in the 44th percentile of her class.

The 10 mock admissions committees at the Fourth Colloquium on College Admissions unanimously rejected her application to the women's college described.

Diana failed four academic courses and physical education in her freshman year. She was required to withdraw for failing to meet minimum requirements at the end of the year. Diana could not get her work done on time, cut classes, and ceased attendance altogether for some courses. She lacked any real and driving interest in serious study.

The 10 "admissions committees" were unanimous in selecting Diana for admission to the women's college.

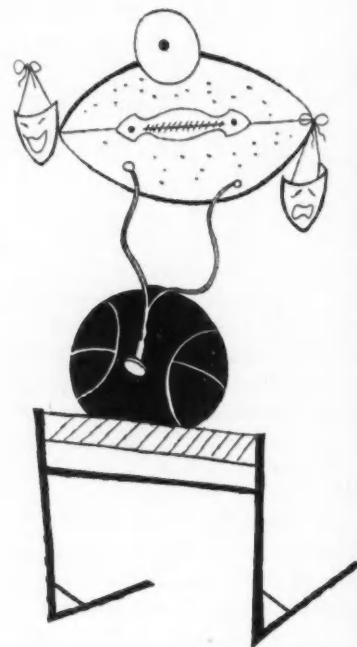
Grace was well liked by all at college. She majored in political science and was active in the international relations club on campus, represented her residence hall in several campus groups, and took part in a number of other activities. She was elected Phi Beta Kappa in her junior year and received her bachelor's degree *magna cum laude*. She studied at Oxford University under a Fulbright award for two years following her senior year. Her senior year rank was in the 98th percentile.

Grace was unanimously accepted for admission by the 10 "admissions committees."

Art flunked out of college the first semester of his sophomore year. His motivation was poor. He transferred to the state agricultural school and graduated with the rank of sixtieth in a class of 220. He is now doing agricultural missionary work and is happy and successful.

Only three of the 10 Colloquium committees chose Art for admission to the men's college previously described.

Diz's average at graduation was 83; he ranked seventy-second in a class of 236. His extracurricular activities included three years of football and he



was a letter winner in track. Diz was president of the junior honor society and a member of the student council. He is now in medical school.

Diz was "admitted" to the men's college by four of the 10 Colloquium committees.

Gap graduated from college *summa cum laude* in mathematics with an average of 93 and ranked first in a class of 219. He was elected to Phi Beta Kappa in his junior year, and was vice president of the debating club and secretary-treasurer of the junior honor society. Gap was also president of the student council and president of the senior honor society. He is now in the law school of one of the country's leading universities.

The 10 "admissions committees" for the men's college were unanimous in choosing Gap.

- ✓Adelphi College\*
- ✓Agnes Scott College
- ✓Albertus Magnus College
- ✓Alfred University
- ✓Allegheny College
- ✓Amherst College
- ✓Antioch College
- ✓Bard College
- ✓Barnard College
- ✓Bates College
- ✓Beaver College
- ✓Beloit College
- ✓Bennington College
- ✓Boston College
- ✓Boston University\*
- ✓Bowdoin College
- ✓Brandeis University
- ✓Brown University
- ✓Bryn Mawr College
- ✓Bucknell University
- ✓Caldwell College\*
- ✓California Institute of Technology
- ✓Carleton College
- ✓Carnegie Institute of Technology
- ✓Catholic University of America\*
- ✓Cedar Crest College
- ✓Centre College of Kentucky\*
- ✓Chatham College
- ✓Chestnut Hill College\*
- ✓Claremont Men's College
- ✓Clark University (Mass.)
- ✓Clarkson College of Technology
- ✓Colby College
- ✓Colgate University
- ✓College of Mount Saint Vincent\*
- ✓College of New Rochelle\*
- ✓College of Notre Dame of Maryland\*
- ✓College of Saint Elizabeth\*
- ✓College of Saint Rose\*
- ✓College of the Holy Cross
- ✓College of William and Mary
- ✓College of Wooster
- ✓Columbia College (N.Y.)
- ✓Connecticut College
- ✓Cooper Union
- ✓Cornell University
- ✓Dartmouth College
- ✓Davidson College\*
- ✓Denison University
- ✓DePauw University
- ✓Dickinson College
- ✓Douglass College
- ✓Drew University\*
- ✓Duke University
- ✓Dunbarton College of Holy Cross\*
- ✓D'Youville College\*
- ✓Elmira College\*
- ✓Emmanuel College
- ✓Emory University
- ✓Fordham College\*
- ✓Franklin and Marshall College\*
- ✓Furman University\*
- ✓Georgetown University
- ✓George Washington University
- ✓Georgian Court College\*
- ✓Gettysburg College
- ✓Goucher College
- ✓Grinnell College
- ✓Hamilton College
- ✓Harvard College
- ✓Haverford College
- ✓Hobart College and William Smith College\*
- ✓Hollins College
- ✓Hood College\*
- ✓Immaculata College\*
- ✓Immaculate Heart College\*
- ✓Iona College
- ✓Jackson College for Women
- ✓Kalamazoo College
- ✓Kenyon College

## College Board member colleges

Check (✓) indicates participants in the College Scholarship Service. Dot (•) indicates subscribers to the May 22 Candidates Reply Date Agreement for 1957 (see page 2). An asterisk (\*) following a college's name means it does not include scholarship applicants under the Candidates Reply Date Agreement.

- ✓Knox College
- ✓Lafayette College
- ✓Lake Forest College
- ✓Lawrence College
- ✓Lehigh University
- ✓Lewis and Clark College
- ✓Manhattan College
- ✓Manhattanville College of the Sacred Heart
- ✓Mary Baldwin College
- ✓Marymount College (N.Y.)\*
- ✓Marywood College\*
- ✓Massachusetts Institute of Technology
- ✓McGill University
- ✓Michigan State University
- ✓Middlebury College\*
- ✓Mills College
- ✓Moravian College\*
- ✓Mount Holyoke College
- ✓Muhlenberg College
- ✓Newark College of Engineering\*
- ✓Newcomb College
- ✓Newton College of the Sacred Heart
- ✓New York University
- ✓Northwestern University
- ✓Notre Dame College of Staten Island\*
- ✓Oberlin College
- ✓Occidental College
- ✓Ohio Wesleyan University
- ✓Pembroke College in Brown University
- ✓Pennsylvania State University
- ✓Pomona College
- ✓Princeton University
- ✓Providence College
- ✓Queens College (N.C.)
- ✓Radcliffe College
- ✓Randolph-Macon Woman's College
- ✓Reed College
- ✓Regis College (Mass.)
- ✓Rensselaer Polytechnic Institute
- ✓Rice Institute
- ✓Rollins College
- ✓Rosemont College\*
- ✓Russell Sage College\*
- ✓Rutgers University
- ✓Saint Joseph College (Conn.)
- ✓Saint Joseph College (Md.)
- ✓St. Joseph's College for Women
- ✓St. Lawrence University
- ✓Saint Mary's College (Ind.)\*
- ✓Salem College (N.C.)\*
- ✓Scripps College
- ✓Seton Hill College\*
- ✓Simmons College
- ✓Skidmore College
- ✓Smith College
- ✓Stanford University
- ✓Stevens Institute of Technology
- ✓Swarthmore College
- ✓Sweet Briar College
- ✓Syracuse University
- ✓Trinity College (Conn.)
- ✓Trinity College (Wash., D.C.)\*
- ✓Tufts University
- ✓Union College (N.Y.)
- ✓United States Air Force Academy
- ✓United States Merchant Marine Academy
- ✓United States Military Academy
- ✓University of California
- ✓University of Chicago
- ✓University of Colorado
- ✓University of Connecticut
- ✓University of Denver\*
- ✓University of Massachusetts
- ✓University of Michigan
- ✓University of Notre Dame
- ✓University of Pennsylvania
- ✓University of Redlands
- ✓University of Rhode Island\*
- ✓University of Rochester
- ✓University of Southern California
- ✓University of the South\*
- ✓University of Vermont\*
- ✓University of Virginia
- ✓Ursinus College\*
- ✓Vassar College
- ✓Villanova University\*
- ✓Wagner Lutheran College
- ✓Washington and Jefferson College
- ✓Washington and Lee University\*
- ✓Wellesley College
- ✓Wells College
- ✓Wesleyan University
- ✓Western Reserve University
- ✓Wheaton College (Mass.)
- ✓Wheelock College
- ✓Whitman College
- ✓Whittier College
- ✓Williams College
- ✓Wilson College
- ✓Worcester Polytechnic Institute
- ✓Yale University
- ✓Yeshiva University

## Non-member colleges participating in the College Scholarship Service

- Case Institute of Technology
- Colby Junior College
- Colorado College
- Hofstra College
- Illinois College
- Illinois Wesleyan University
- John Carroll University
- Juniata College
- Lake Erie College
- La Verne College
- Monmouth College (Ill.)
- Polytechnic Institute of Brooklyn
- Pratt Institute
- Rhode Island School of Design
- St. John's College (Md.)
- St. Joseph's College (Ind.)
- Sarah Lawrence College
- Stetson University
- Tulane University
- University of New Hampshire
- Upsala College
- Vanderbilt University
- Wake Forest College
- Western College for Women
- Willamette University
- Wilmington College (Ohio)



## NEWS OF THE COLLEGE SCHOLARSHIP SERVICE

### Annual meeting April 4

**Stalnaker, Jacoby to speak:** Representatives of the 156 colleges participating in the College Scholarship Service will convene for the third annual meeting of the CSS in the Grand Ballroom of the Hotel Biltmore in New York City on April 4, the day following the spring meeting of the College Board. Full details will be sent to the colleges in the near future.

At the meeting John M. Stalnaker, president of the National Merit Scholarship Corporation, and George A. Jacoby, personnel relations director of the General Motors Corporation, will speak and answer questions on the sponsored scholarship programs of their respective organizations. They will address the morning session, scheduled for 10:00 a.m. The afternoon session of the meeting will be devoted to a discussion of CSS problems from the floor.

**Fee increases proposed:** The CSS Committee has recommended to the Executive Committee that fees for services provided colleges and scholarship applicants by the CSS be based on the cost of those services.

To be reviewed by the Executive Committee for possible presentation before the College Board at its April 3 meeting, the recommendation proposes an increase in the fee charged the candidate for each copy of the Parent's Confidential Statement sent to colleges or sponsors, an increase in the price charged colleges for each computation of estimated family contribution, and the possible introduction of an annual fee for all participating colleges. Only those colleges which are not members of the College Board now pay an annual 50-dollar participation fee.

According to the recommendation, the fee charged for making and sending each transcript of the parent's statement should be increased from the present one dollar to two dollars, while the computations should be billed to colleges at cost instead of at

the present rate of one dollar each. The average cost of making each computation, which the Service is working to reduce, is now about three and a half dollars.

**Committee changes:** John F. Morse, director of admissions at the Rensselaer Polytechnic Institute, has been named Chairman of the CSS Committee of the College Board. He succeeds John U. Monro, director of the financial aid office, Harvard University.

Recently appointed members of the Committee are Clara R. Ludwig, assistant director of admissions, Mount Holyoke College; Douglas V. McClane, director of admissions, Whitman College; Ivan W. Parker, secretary, committee on scholarships, University of Michigan; and Robert W. Storandt, associate director of admissions, Cornell University.

They replace on the Committee: Margaret E. Bowman, executive secretary, committee on scholarships, Wellesley College; Arthur Howe, Jr., dean of admissions and student appointments, Yale University; C. William Reiley, director of admissions, Northwestern University; and Edward Sanders, dean of students and dean of admissions, Pomona College.

### Early volume high

**17,750 parents file:** From early September through the first of February, 17,750 parents had sent confidential financial statements to the CSS for duplication and forwarding to the colleges at which their children were applying for admission with financial aid. The total was almost 30 per cent higher than the number received in the corresponding period last year.

During the same period the Service made and sent 43,000 copies of the statements to colleges specified on the forms, averaging 2.42 copies sent for each original statement received.

**Computations on 4,090:** Through February 1, the CSS computation service had also made and sent to colleges

and sponsors suggested estimates of the amounts that 4,090 of the families filing statements might reasonably be expected to contribute toward the cost of the applicant's college education. A few sponsors and 84 colleges have contracted for computations this year. At meetings every Thursday evening and Friday that will continue through March, small groups of financial aid and admissions officers of the participating colleges are working with the computation service this year to solve and try to develop standard procedures for handling difficult needs analysis cases.

**Three more participants:** Since last October, three colleges which are not members of the College Board have joined in the Service, bringing to 156 the total number of participating colleges. A full list of current participants is given on the preceding page.

### Findings released

**95 colleges compared:** Completing its first major research project, the CSS recently formulated the results of a comparative analysis of the financial aid programs of the 95 colleges which participated in the CSS for 1954-55. An article presenting and discussing the findings appears in this issue (see page 14).

A major study concerning the characteristics of students who receive financial aid from CSS colleges and of students who apply for but do not receive aid is the next extensive research inquiry scheduled for completion.

**Consolidated reports sent:** In February, each of the 130 colleges participating in the CSS in 1955-56 was sent a consolidated report for that year. Compiled from data supplied by the colleges as a participation requirement, each college's report lists all of its scholarship applicants for the year and all financial aid offers and awards made them by other CSS colleges. The recently released reports constitute the second annual set to be prepared.

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